# THE

# MANAGEMENT REVIEW

THE MONTH'S BEST IN BUSINESS READING ...

DIGESTS / FEATURE ARTICLES / BOOK REVIEWS

Special Features:

Making Long-Range Planning Work

Plain Talk About the Shorter Work Week

Parkinson's Law

Organizing and Administering the Reporting Function

AMERICAN MANAGEMENT ASSOCIATION

No margin for error . . .

#### SPECIAL RESEARCH & DEVELOPMENT CONFERENCE

# MANAGING FOR PROFIT IN THE SMALL AND MEDIUM-SIZED BUSINESS

March 19-21, 1958 • La Salle Hotel • New York

Smaller companies will have to screen their product planning carefully these days to find out what kind of management action will put all the resources of their organization solidly behind an effective drive for profits. For product failure in the small or medium-sized company most often spells profit disaster—and the margin for faulty decisions grows slimmer every day.

At this Special AMA Conference, you will learn how industry leaders are integrating new product development in closely-knit, well-coordinated programs . . . how all executive functions—top and general management—are included.

You will hear experts define—in the light of their own broad experience—standards that you should be applying to the current roles of organization, creativity, technical developments, new markets, budgets and financial controls, and executive development in the new-product picture.

You won't want to miss this stimulating review of a challenging situation. Make your plans to attend now. Write Dept. M2, R&D Division, AMA.

AMERICAN MANAGEMENT ASSOCIATION, INC. 1515 Broadway • Times Square • New York 36, N.Y.



- Charting the Future. Some executives who have always planned ahead to a greater or less degree may feel that they have little to learn about long-range planning. Actually, however, modern long-range planning on a systematic basis is quite a different matter from the kind of "blue sky" thinking that sometimes went under the guise of planning in the past. In Making Long-Range Planning Work (page 4), Bruce Payne and James H. Kennedy offer some suggestions for making LRP the eminently practical management tool it should be.
- Where Will It Come From? Labor's often reiterated statement that it intends to press for the shorter work week leaves little doubt that this will become an important bargaining issue—one that management can't afford to be in the dark about. Joseph M. Bertotti's article (page 9) examines the implications of this demand and its possible economic consequences.
- Financial Reporting. The man behind the men who make the critical decisions within a company is the executive who provides financial data to top management. And yet relatively little attention has been given to the problems of organizing and administering this function for maximum effectiveness. DAVID MOFFITT's article (beginning on page 18) offers some guides that will be of practical use to both large and small companies.
- The Rising Pyramid. Parkinson's Law seems already to have secured a unique and enduring place in the language and thinking of informed businessmen, and its promulgator may well be remembered as the Newton of Bureaucracy. Because we wouldn't want any reader of the Review to be caught not knowing what Parkinson's Law is, this issue contains a somewhat abridged version of the book's keynote chapter (see page 14).

# THE MANAGEMENT REVIEW

#### FEATURES

- 4 Making Long-Range Planning Work by Bruce Payne and James H. Kennedy
- 9 Plain Talk About the Shorter Work Week by Joseph M. Bertotti
- 14 Parkinson's Law by C. Northcote Parkinson
- 18 Organizing and Administering the Reporting Function by David Moffitt

#### BURINESS DIGESTS OF THE MONTH

#### Trends and perspectives

- 23 Can We Control Business Slumps? (Saturday Review)
- 29 Industry Keeps the Lid on Prices (The Wall Street Journal)
- 31 Modern Design for Industry (Newsweek)
- 43 How Reliable Is the Consumer Price Index? (Time)
- 45 College Graduates and Industry: Is the Honeymoon Over?
  (Dartnell)
- 63 Can Service Industries Boost Productivity? (Challenge)

#### Management policy and practice

- 37 Business Cracks Down on Costs (Business Week)
- 40 The Trusted Thieves (Fortune)
- 52 Is Everybody Happy? Measuring Job Satisfaction in 132 Companies (Bureau of National Affairs)
- 55 Where Are the White-Collar Workers? (Dun's Review and Modern Industry)

#### Operating guides for executives

- 48 Getting Better Results with Fewer Meetings (Nation's Business)
- 58 Eight Pitfalls in Market-Testing New Products (Commerce)
- 65 Helping Vendors Maintain Quality Standards (Purchasing)

#### What others are doing

- 26 Business Travel—Going Up! (The New York Times Magazine)
- 34 Why Companies Diversify (Printers' Ink)
- 60 Who Profits From Trading Stamps? (Harvard Business Review)

#### DEPARTMENTS

#### Also Recommended -page 68

Brief summaries of other timely articles

#### Survey of Books for Executives -page 91

Cover photograph: H. Armstrong Roberts

HARWOOD F. MERRILL, Editor-in-Chief

VIVIENNE MARQUIS, Executive Editor ROBERT F. GUDER, Associate Editor PETER REID, Digest Editor LYDIA STRONG, Contributing Editor JULIET M. HALFORD, Book Review Editor

THE MANAGEMENT REVIEW is published monthly by the American Management Association, Inc., at 1515 Broadway, Times Square, New York 36, N. Y. Entered as second-class matter March 26, 1925, at the Post Office at New York, N. Y., under the act of March 3, 1879. Subscriptions: \$7.50 per year (non-members, \$12.50). Single copies: \$1.00 (non-members, \$1.25). Volume XLVII, No. 2, February, 1958.

Changes of address should be forwarded to the publishers one month in advance, and postal zone numbers should be included in all addresses

The American Management Association does not stand sponsor for views expressed by authors in articles issued in or as its publications.

An index to The Management Review is published annually with the December issue. The contents are also indexed in the Industrial Arts Index. The Management Review is microfilmed by University Microfilms, Ann Arbor, Mich.

Copyright @ 1958 by American Management Association, Inc.



#### ■ Bruce Payne and James H. Kennedy Bruce Payne & Associates, Inc. Westport, Conn.

In most progressive companies, it is no longer necessary for executives to be sold on the values of long-range planning. The advances of modern technology and the effects of changing business conditions have made complacent drifting and intuitive judgment luxuries that today's managers can no longer afford. A sound, realistic plan for future action can spell the difference between corporate prosperity and failure in the years to come, and forward-looking managements are adopting the principles of long-range planning to minimize the risks that lie ahead and to insure optimum results from the development of their company operations.

#### WHAT IS LONG-RANGE PLANNING?

Long-range planning (LRP) is a new management technique that coordinates all the people and functions of a company in the achievement of practical goals, developed on a scientific and objective basis. It is much more than businesss forecasting, which involves trends and projections; long-range planning goes further, helping management to determine how to take advantage of the trends, how to minimize the effects of unfavorable trends, and how to attain reasonable and profitable objectives.

Nothing in the company can be overlooked or omitted in developing a long-range plan. Timetables, specific plans, well-defined responsibilities, checks and balances, and intermediate as well as long-range goals must be developed for every facet of corporate operation. In most companies, this organized plan outlines a guide for management action for at least five or ten years, and it provides a detailed plan of operation for at least two years in the immediate future.

#### KEY STEPS IN LONG-RANGE PLANNING

The experience of the leading companies who have adopted long-range planning is now beginning to crystallize into a rather definite pattern for the development of an effective plan. With judicious interpretation, these steps can be applied to the long-range planning efforts of practically any company, large or small.

#### 1. Define and state corporate goals

Put the corporate goals in writing, and make sure that everyone who has any part in determining or achieving the goals understands them.

Obviously, no firm can engage in long-range planning without knowing, in some detail, the real goals of the company. But how well are goals usually understood? Yours is an unusual company if even the key executives can agree on what the corporate goals really are.

Clear, mutual understanding of corporate goals, then, is part of the preparation for LRP. The basic corporate goals should consist of much more than a simple statement such as "To make money," or "To return 5 per cent annually on investment," or "To be first in volume in our industry." Goals should take into account, practically, such factors as:

Risk ("We might triple sales and be No. 1 if we are successful, but if the plan fails we might lose our present

position and seriously endanger the business. Is the potential gain worth the risk?")

- Timing ("Does it really make any difference if we get there in 1965 or in 1970?")
- People ("Should we restrict our goals to those that can be achieved without major executive changes? What is our attitude toward our employees, our stockholders, management, the trade, the community?")

#### 2. Measure achievement of corporate goals to date

This measurement requires complete honesty. It calls for stepping back from day-to-day operations to form a completely objective assessment of all strengths and weaknesses, both within the company and outside in the market.

Because utter objectivity is extremely important, the over-all assessment is often best accomplished by a competent consulting firm. This step in LRP is, in effect, a corporate audit, and should include consideration of over-all policy and management, financial position, sales and marketing, organization and staffing, physical plant and equipment, manufacturing effectiveness, research and development, quality control, personnel administration, advertising, and public relations.

#### 3. Bolster weak areas; tighten management controls

Once any corporate weaknesses that do exist have been recognized as such, it is relatively easy to take steps of improvement. Such correction should be made before a company progresses any further with LRP.

This is also the time to tighten any management controls that should prove inadequate. The long-range planning function, a nerve center of the company, naturally requires current information in many forms—sales statistics, financial position, manufacturing data, economic projections. However, since this same sort of information is needed by top management and functional officers in their day-to-day and short-term activities, strengthening the existing control system is preferable to establishing separate controls for the use of the LRP function alone.

#### 4. Write the plan and get it accepted

Although modern LRP is a discipline and a way of thinking, the plan should be put on paper to insure against possible omissions and to assure mutual understanding.

Each executive who is to share in the work of accomplishment should read and understand the entire long-range plan as it pertains to his function and to the company as a whole. This is the time for ironing out the details and smoothing over any personal differences or interpretations. Once the plan is accepted, further changes should be discouraged, so it is well worth while to devote several weeks to this step.

#### 5. Put LRP to work

In order to keep the plan up to date, progress should be checked regularly and revisions or alternate plans made when necessary. This is where the hardest work must be done—often without the glamor or enthusiasm associated with the LRP project when it was new and exciting.

The plan should be audited every three months in the beginning, once a year after that time. Projections and detailed plans should be re-extended into the future with each audit of the plan; e.g., the 1958-1963 plan will be extended in 1959 to cover 1964, and so forth.

#### MAKING LRP WORK

Successful long-range planning is not easy. The basic requirements for making LRP work are fresh thinking, real decision-making, and hard work.

Fresh Thinking. It is, of course, natural to expect executives to think primarily about their own areas of responsibility: the controller about money matters; the chief manufacturing officer about plant, equipment, materials, and personnel; the top marketing executive about sales forecasts and share of market. In many companies, most of the coordinating between these somewhat diverse interests is done personally by the president or an executive vice president.

Through a sound long-range plan, executives become more in-

terested in the company as a whole. Because they see where the company is headed and understand the role played by each function, they can apply themselves even more strenuously to the fulfillment of their own responsibilities. And, since LRP looks into a future in which change is synonymous with progress, the very thinking about planning helps to break down resistance to change. LRP, in effect, opens minds and keeps them open and receptive to change.

Decision-Making. Fuzzy management disappears when LRP is applied. Ownership and management, having made major decisions on corporate goals and their achievement, must follow through with many other important decisions. Real LRP eliminates the gray areas of doubtful responsibility between executives and between departments and divisions.

Hard Work. LRP, to be effective, must be a living instrument—not a confidential report in a locked drawer. Like true cost reduction, it is a philosophy that needs daily application and attention, frequent review, and constant interpretation. To make LRP work, therefore, management must roll up its sleeves, throw away tradition if necessary, and pitch in. Timid managers avoid LRP because it means committing themselves and the company to a course of action which, although flexible enough to meet major changes in conditions, is rather definite. But most executives today realize that, although it takes hard work to attain the established goals, it is far more dangerous to allow the company to drift along with no definite goals to work toward.

#### GETTING PARTICIPATION IN LRP

Long-range planning will work if top executives have confidence and faith in it. Since it is a primary responsibility of the president or chief executive officer, it is most essential that he personally lead the planning effort. The president's enthusiasm and support will filter throughout the organization, and the people who work daily with the plan will make LRP work by striving to meet its timetables.

Much of the real work in LRP takes place long before the first plan is written, and one of the reasons for the success of today's plans is the effort in preplanning—planning for the planning.

(Continued on page 73)



#### ■ Joseph M. Bertotti

Manager, Public and Employee Relations Research General Electric Company

Despite the temporary "breather" that our economy is now taking, following a tremendous boom in private capital investment, inflation is still the most serious long-run economic problem facing the country today. At the end of 1957, for example, the Gross National Product was at an annual rate of some \$435 billion, compared with some \$415 billion at the end of the previous year. Yet the nation's actual physical output remained about the same. The difference—about \$20 billion—is an indication of the inflation we have experienced during the past year alone.

There is no precise agreement regarding the causes of inflation. But it is becoming increasingly clear as time goes on that wage increases, unmatched by corresponding increases in productivity, are a major contributor to inflationary pressure.

Professor F. A. Von Hayek of the University of Chicago has made the point this way:

"The present division of responsibility, where each union is concerned only with obtaining the maximum rate of money wages without regard to the effect on employment, and the monetary authorities are expected to supply whatever increases of money income are required to secure full employment at the resulting wage level, must lead to continuous and progressive inflation."

Now union officials are proclaiming their goal of a shorter work week, accompanied by an increase in pay. Walter Reuther, for example, has told his members: "It would be dangerously unrealistic to talk about a reduction in work hours with the same take-home pay. We must win a shorter work week with increased take-home pay, for only thus can we create the greater purchasing power needed to balance our greater productive power."

Of course, the idea of working shorter hours and getting more money is an attractive one, and few people would oppose it in theory. But several vital questions immediately arise: Is such a plan feasible? What would be its effects? And who would foot the bill?

These are matters of broad public concern, and it is important that employees and the public at large understand the issues involved. The task of educating employees will inevitably fall to the managements of individual companies, who must undertake the communications programs necessary to inform their employees of the real significance of shorter work week proposals.

#### THE ECONOMICS OF THE SHORTER WORK WEEK

To begin at the core of the issue, what does the shorter work week mean in terms of labor costs? Even without an increase in take-home pay, the costs of the shorter work week would be staggering. For example, going from a five to a four-day week, with no increase in daily hours, would require a 25 per cent pay rate increase to maintain take-home pay. If a fifth day were scheduled at time-and-a-half to maintain production, labor costs would rise  $37\frac{1}{2}$  per cent. Going to a six-hour day, five days a week, would require a  $33\frac{1}{3}$  per cent increase to maintain take-home pay, not to mention the cost of adding an extra shift in those continuous process industries that must operate around the clock.

We are talking about really big money. Compensation for all employees in the economy in 1956 was about \$227 billion, so when we talk of 25 or 37½ per cent increases in pay rates, we are talking in magnitudes of \$56 billion to \$85 billion in direct labor costs alone. Even if this kind of money were available to finance wage increases—and it is not—the resultant inflation would dwarf the inflationary creep we have been experiencing.

#### PRODUCTIVITY INCREASES

Is there any possibility that such an increase in costs might be offset by a corresponding increase in production? Proponents of a shorter work week stress the increases in production anticipated in the future. But the productivity outlook is not as bright as some would make it appear. By the best measurements we have, it appears that historically the economy as a whole has experienced an annual average gain in productivity of just over 2 per cent, while manufacturing, taken by itself, has had an annual gain of about 3 per cent in peacetime years.

Productivity rises at uneven rates, varying considerably from year to year, from industry to industry, and even from company to company within an industry. Sometimes it doesn't rise at all.

Recognized economists give us no reason to hope for an increase in productivity much, if any, in excess of historical rates. Consequently, if the work week were reduced to four days, resulting in a drop of approximately 20 per cent in production, we would be the better part of a decade in getting output per worker back up to present levels.

Writing in the American Economic Review, Charles D. Stewart of the United States Department of Labor projected population, employment, productivity, and other relevant statistics in order to show the consequences of a shorter work week under various possible conditions in the future. "One result," he says, "seems axiomatic in full employment models at least: the choice of relatively more leisure results in lower gross national product—a foregoing of private consumption or alternatively of additional public services."

In other words, if we work fewer hours in the future we will have to content ourselves with fewer goods and services than we would have if we continue present working hours. Common sense tells us that if we substitute a four-day week for a five-day week, our economy will immediately decrease its output to about four-fifths of previous levels—and our income and standard of living will be that much less.

#### THE EFFECT ON LIVING STANDARDS

What does this mean in terms of inflationary pressures? Even with present ratios of purchasing power to output we have been unable to halt the dangerous march of inflation, despite the desperate efforts made in many quarters. Now it is proposed to raise take-home pay while lowering our output potential. Can there be greater economic nonsense?

The obvious truth is that any claim that unions can obtain a reduced work week without loss of real wages is a fraud. There is simply no way in which labor as a whole can reduce working hours by any amount uncompensated for by increased productivity and not end up with less to consume. It is equally obvious that if unions should succeed in winning what their officials say they are after—more money for less work—the relative stability of the present economy would be severely jarred.

Of course, if American workers wish to do less work for a corresponding decrease in pay, that is another matter. Wilford I. King has pointed out that today's "average worker" could work only 16 hours a week and still live as his prototype of a century ago. Or he could work 70 hours and have an income almost twice that which he now enjoys. He can have less goods for less work or more goods for more work, but he cannot have *more* for *less*.

John L. Lewis, president of the United Mine Workers, has acknowledged this fact: "The question of the six-hour day is one of cost . . . When you reduce the day from eight to six hours, it means a 25 per cent increase, at least, in costs . . . These are the facts of life we have to consider. If you want to stop eating so much and loaf more, we can get you the six-hour day."

The issue of the shorter work week involves a simple choice between higher real wages—that is, more goods and services to consume—or more leisure time. It must be one or the other. No power on earth can give us both.

Union officials say they have two objectives in mind. First, they want to split up the available work as a hedge against unemployment. Second, they want to secure for their members the benefits of additional leisure time.

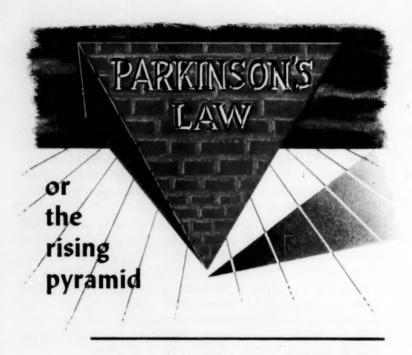
The idea of creating additional jobs by spreading the work might appear to make some sense during depression years of extensive unemployment. It might be logical during years in which the number of workers entering the work force increased much more rapidly than the economy could absorb them. But no one is anticipating a depression, and the work force is increasing less rapidly than the economy requires.

As a matter of fact, for at least the next five to ten years we will be in a period of relative labor shortage. Although our population is growing rapidly, most of this growth is taking place at both ends of the age scale. The labor force is growing less rapidly than the total population, and it is decreasing proportionally among those whose ages range from 25 to 40. This is the consequence of the low birth rate during the 1930's. Not until the individuals born during the World War II "baby boom" enter the work force will the trend be reversed.

In the meantime, our economy faces two grave challenges. One is finding the labor supply necessary to maintain our past rate of advance in the level of living. Discussing this problem with a Congressional committee, General Electric president Ralph J. Cordiner stated: "After 1965, when the proportion of labor force to total population increases, some feel that there may be a trend toward the shorter work week. But our feeling is that the demand for goods may rise so fast in the 1970's that we will still be hard put to produce enough goods to satisfy the market on a 40-hour basis, and the American public will choose more goods in preference to a shorter work week."

The second challenge is that posed by the Soviet Union. The military, scientific, and industrial progress being made by the Russians has aroused the United States to the danger of becoming an inferior power. To prevent this, our defense budgets are to be increased substantially. But dollars by themselves do not build missiles, construct submarines, or produce needed goods for our

(Continued on page 81)



#### **■ C. NORTHCOTE PARKINSON**

Work expands so as to fill the time available for its completion.

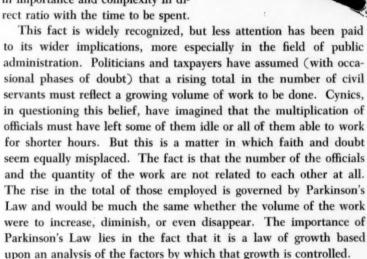
General recognition of this fact is shown in the proverbial phrase, "It is the busiest man who has time to spare." Thus, an elderly lady of leisure can spend the entire day in writing and dispatching a post card to her niece at Bognor Regis. An hour will be spent in finding the post card, another in hunting for spectacles, half an hour in a search for the address, an hour and a quarter in composition, and twenty minutes in deciding whether or not to take an umbrella when going to the mailbox in the next street. The

EDITOR'S NOTE: Since Parkinson is rapidly becoming a kind of household word in management circles, we present, for the amusement and information of readers who have not yet caught up with the much-discussed book, Parkinson's Law and Other Studies in Administration, a somewhat abridged version of its keynote chapter. This article is published by special arrangement with the publisher, Houghton Mifflin Company, Boston, Mass., and the drawing on page 15 is used with the permission of the artist, Robert C. Osborn.

total effort that would occupy a busy man for three minutes all told may in this fashion leave another person prostrate after a day of doubt, anxiety, and toil.

Granted that work (and especially paperwork) is thus elastic in its demands on time, it is manifest that there need be little or no relationship between the work to be done and the size

of the staff to which it may be assigned. A lack of real activity does not, of necessity, result in leisure. A lack of occupation is not necessarily revealed by a manifest idleness. The thing to be done swells in importance and complexity in direct ratio with the time to be spent.



#### THE RISING PYRAMID

Omitting technicalities (which are numerous), we may distinguish at the outset two motive forces. They can be represented for the present purpose by two almost axiomatic statements: (1) "An official wants to multiply subordinates, not rivals" and (2) "Officials make work for each other."

To comprehend Factor 1, we must picture a civil servant, called A, who finds himself overworked. Whether this overwork is real or imaginary is immaterial, but we should observe, in passing, that A's sensation (or illusion) might easily result from his own decreasing energy, a normal symptom of middle age. For this real or imagined overwork there are, broadly speaking, three possible remedies. He may resign; he may ask to halve the work with a colleague called B; he may demand the assistance of two subordinates, to be called C and D. There is probably no instance, however, in history of A's choosing any but the third alternative. By resignation he would lose his pension rights. By having B appointed, on his own level in the hierarchy, he would merely bring in a rival for promotion to W's vacancy when W (at long last) retires. So A would rather have C and D, junior men, below him. They will add to his consequence; and by dividing the work into two categories, as between C and D, he will have the merit of being the only man who comprehends them both.

It is essential to realize at this point that C and D are, as it were, inseparable. To appoint C alone would have been impossible. Why? Because C, by himself, would divide the work with A and so assume almost the equal status that has been refused in the first instance to B, a status the more emphasized if C is A's only possible successor. Subordinates must thus number two or more, each being thus kept in order by fear of the other's promotion.

When C complains in turn of being overworked (as he certainly will), then A, with the concurrence of C, will advise the appointment of two assistants to help C. But he can then avert internal friction only by advising the appointment of two more assistants to help D, whose position is much the same as C's. With this recruitment of E, F, G, and H, the promotion of A is now practically certain.

#### MANY HANDS MAKE LIGHT THE WORK?

Seven officials are now doing what one did before. This is where Factor 2 comes into operation. For these seven make so much work for each other that all are fully occupied and A is actually working harder than ever. An incoming document may well come before each of them in turn. Official E decides that it falls within the

province of F, who places a draft reply before C, who amends it drastically before consulting D, who asks G to deal with it. But G goes on leave at this point, handing the file over to H, who drafts a memorandum that is signed by D and returned to C, who revises his draft accordingly and lays the new version before A.

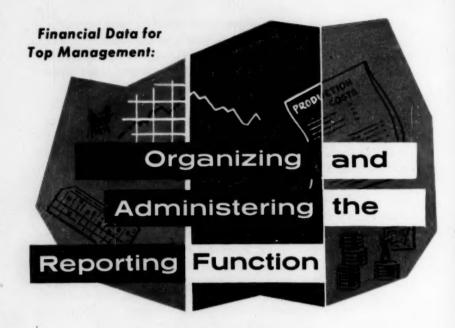
What does A do? He would have every excuse for signing the thing unread, for he has many other matters on his mind. Knowing that he is to succeed W next year, he has to decide whether C or D should succeed to his own office. He had to agree to G's going on leave even if not yet strictly entitled to it. He is worried whether H should not have gone instead, for reasons of health. H has looked pale recently—partly but not solely because of his domestic troubles. Then there is the business of F's special increment of salary for the period of the conference and E's application for transfer to the Ministry of Pensions. A has heard that D is in love with a married typist and that G and F are no longer on speaking terms—no one seems to know why. So A might be tempted to sign C's draft and have done with it.

#### A JOB WELL DONE

But A is a conscientious man. Beset as he is with problems created by his colleagues for themselves and for him—created by the mere fact of these colleagues' existence—he is not the man to shirk duty. He reads through the draft with care, deletes the fussy paragraphs added by C and H, and restores the thing to the form preferred in the first instance by the able (if quarrelsome) F. He corrects the English—none of these young men can write grammatically—and finally produces the same reply he would have written if officials C and H had never been born.

Far more people have taken far longer to produce the same result. No one has been idle. All have done their best. And it is late in the evening before A finally quits his office and begins his journey home. The last of the office lights are being turned off in the gathering dusk that marks the end of another day's administrative toil. Among the last to leave, A reflects with bowed shoulders and a wry smile that late hours, like gray hairs, are among the penalties of success.

17



#### ■ David Moffitt

Vice President, Connecticut Hard Rubber Co. New Haven, Conn.

THE EFFECTIVENESS OF FINANCIAL REPORTING is the most important factor in determining the contribution that the financial arm of management makes to the company's success. Some companies undoubtedly feel that the accounting process has been completed when the books have been closed and the standard financial reports have been prepared. Yet accounting data, particularly when prepared in accordance with generally accepted principles, are not necessarily the data of most value to top management in planning and controlling the future of the company, nor are they always in the most acceptable form. Reporting is a separate process that must start where the accounting process ends. And unless care is given to the organization and administration of this process, not only the work of reporting but also the work of accounting will be a dead loss to top management.

The individual to whom the responsibility of reporting financial data to top management has been assigned may delegate specific reporting tasks to subordinates, but the responsibility for the reporting process remains his as an individual. The organization of the reporting function deals with the set-up of his department and includes the relationship of this individual to his immediate superior, to top management as a group, and to others in the company.

Administration concerns the conduct of the day-to-day operations of reporting, the personnel administration of the reporting group, the technical aspects of reporting (such as choice of media and interpretation of data), and the scheduling of work.

Although in some smaller companies the person responsible for the accounting activities holds the title of chief accountant, treasurer, or even auditor, in most companies (and in this article) he is called the controller.

The most obvious organizational provision for reporting financial data to top management is to make the controller responsible for the reporting function. In a small company this is certainly feasible, because the administrative and technical accounting problems are not complex or burdensome enough to prevent proper attention to the reporting function. This simple type of organization also has the advantage of placing the responsibility in the hands of the man most familiar with the way the accounts are operated.

In medium or large-size companies, however, the operating detail of the accounting operation is so great that the controller lacks time for the interpretation and study required for a good reporting system. This has led to a separation of the line (administration and technical accounting) and staff (reporting) functions of the controller's job.

#### DELEGATING THE REPORTING RESPONSIBILITY

In some companies, an administrative assistant or office manager can lighten the work load of administration, and accounting specialists (such as tax experts) can remove most of the technical accounting problems. This leaves the controller more time to concentrate on reporting.

In the majority of companies, however, the full reporting responsibility is passed from the controller to someone subordinate to him. It may be given to a staff assistant, to an assistant controller for

reports, to the budget director, or to the head of the group concerned with planning and control or statistics.

This organization of the controller's department has the inherent advantage of separating line and staff functions, leaving the reporter free from operational detail and from the stress and strain of closing deadlines. Thus freed, he can spend his time in the analysis and interpretation of data for top management. He also has the opportunity to correlate data from sources outside the books of account—such as production statistics or industry indices—and to prepare any special reports that may be necessary.

Taking the responsibility for reporting away from the line accountant in this way has certain concurrent disadvantages. In the first place, it reduces the work of the operational accountant to mere detail, and he may lose a good deal of his interest in the job. Moreover, the person preparing reports is not intimately familiar with how the accounts are handled, particularly in special situations, and this lack of knowledge may lead at times to erroneous conclusions or even to ignorance of significant trends.

#### SEPARATE REPORTING UNITS

In contrast to these organization set-ups, which center the responsibility for financial reporting within the financial area of the company, some companies have separated the reporting unit completely from the financial staff. This separate unit is usually responsible to someone in the upper levels of top management—the chairman, the president, or the executive vice president. Whether this type of organization has been chosen because past failures of the reporting process have been blamed on the accounting group or whether it is because of a belief that accounting training is not the best preparation for awareness of management problems is not always apparent. Whatever the reason, such an organizational set-up occurs frequently enough to be considered in some detail.

In actual operation, such an organization may simply take the form of a staff assistant to the president or, more formally, a control group that operates like a captive management consulting firm. The advantages of such an arrangement are obvious: The job of reporting is recognized as a vital function, not just an addendum to the controller's job. As an arm of top management, the reporter is

more aware of what information is needed and how to present it. Completely independent of all operating sections of the company, he can be more objective and, of course, have the advantages of being separated from the line accounting function.

#### DISADVANTAGES OF THE SEPARATE UNIT

At the same time, there are some serious drawbacks to this organizational arrangement. The most obvious is that it leads to the issuance of duplicate reports that are not necessarily reconciled. For instance, the audited earnings statement prepared by the accounting department will not always agree with earnings statements prepared by the control group. Another drawback is the addition of another person directly responsible to top management. The existence of one more assistant is not necessarily bad, but its organizational effect should be considered when appraising the reporting system.

These categories of organizational provisions for reporting financial data to top management have been necessarily arbitrary. In actual practice, all shades of organizational differences exist in various companies. For instance, in some large companies the reporting unit is assigned directly to the financial vice president, on a line with the controller but completely separate from him. These classifications have been used to show the range of possibilities and to point out some of the advantages and pitfalls of each.

#### INTRACOMPANY RELATIONSHIPS

Regardless of where the reporting function is located within the organization, the person responsible must be in almost continuous contact with all other departments and divisions. This contact is a relationship that goes beyond the lines on an organization chart. It is an informal relationship, yet it is absolutely necessary to facilitate the collection of the information to be reported and to insure that the confidence and cooperation of the other departments will be maintained.

The first relationship to be considered, of course, is the relationship between the line accounting group and the reporting unit (if the two have been separated), because the line accountants produce the great majority of the data used in financial reports. It has already been pointed out that there are factors present that might

very well lead to friction between these two groups, and, in fact, have been blamed for the failure of several reporting units.

A far more serious point of friction could arise between the reporting and line executives. The relationship between these two groups is twofold: First, the line executives are responsible for giving the reporting unit factual information as well as reasons and explanations for occurrences in their departments. In return, the reporting unit not only gives them the assistance to be obtained from the reporting system, but also reports to top management on the results of their activities.

#### PRERELEASE CONSULTATION

If a line executive feels that the reports he receives are inaccurate or otherwise not helpful, or if he feels that the reports to top management do not put his activities in the favorable light they deserve, he may become reluctant to cooperate by giving the reporting unit the information it needs. On the other hand, if the reporting unit feels the line executive isn't cooperating with it, reports may be issued that are not entirely fair to the line executive.

One way to overcome these difficulties is to have each report submitted to the line executives whose activities are concerned prior to its issuance to anyone else. This procedure is time-consuming, and it should be used for major reports only. When this is done, the line executive can see the way the presentation of financial data covers his operations and review the reporting unit's analysis and interpretation. If any part of the report is erroneous or unfair, he has the opportunity to urge correction. He also has the chance to point out significant omissions and trends.

This procedure encourages line executives to volunteer more information and explanation in advance because they see it as a way to get better reports. And, of course, the reporting unit has an easier time when it doesn't have to dig quite so hard for the facts.

#### COORDINATING COMPANY REPORTS

Another area of friction is the correlation of the work of the reporting unit with data presented by other units of the company. No matter how well controlled the issuance of miscellaneous reports may

(Continued on page 87)

# Can We Control Business Slumps?

Public support for anti-deflation measures is strong, but we need equally firm support of anti-inflationary measures to keep our economy stable and growing . . .

The Year 1958 has opened with the level of business activity falling and the level of unemployment rising. For the third time since World War II the American public is wondering if we are headed for the kind of major depression that has followed most of our big wars.

If we became bogged down in a major depression, a tremendous expansion of market demand for goods and services would be required to pull us out. The only likely source of such demand would be large-scale deficit spending by the Federal government. But large-scale spending is something to be avoided if possible, for a variety of reasons. Much more attractive and practical is the accepted economic goal of this country: economic stability with growth. This means the simultaneous maintenance of high employment, stable prices, and continually rising levels of per capita production and consumption.

Maintaining economic stability

with growth requires both broad powers and delicate balance. Only the Federal government has the financial resources and universal coverage necessary to do the job, and even it must achieve a difficult combination of conditions.

First, the policy-makers of government must have available to them adequate measures for achieving high employment while keeping prices stable, and for maintaining economic stability without unduly checking economic growth.

Second, they must be able to determine when and with what force to apply such measures.

Third, they must have the will and courage to apply the necessary measures at the right time and with the correct force.

To what extent have these three conditions been met? Considering results since the war, they have not been met perfectly. But the record must be judged a good one. War crises, not peacetime economic forces,

generated the major price inflations, including the repressed inflations that broke out after markets were set free. The recessions of 1949 and 1953 were relatively short and mild. After 1951, there was a considerable period of over-all price stability.

It is by now widely recognized that the group of measures commonly referred to as fiscal policy and monetary policy are the main instruments for maintaining economic stability. Monetary policy acts by influencing the amount of private consumer and business demand; fiscal policy, in addition. compensates changes in government through spending for changes in private demand.

Fiscal policy and monetary policy are very powerful instruments, but they have their defects. First, they are general controls applying to the whole economy and cannot be pinpointed to meet problems of particular sectors or geographical areas. Second, fiscal and monetary policies involve time lags that interfere with their effective use. One kind of time lag is the interval that elapses after the need for action is recognized but before the action is taken. Another kind is the interval that elapses after action is taken but before it has an impact on the economy. In the case of monetary policy, this lag varies according to the sector of the economy, the stock market perhaps responding instantly while the homebuilding market may respond only after six months or more. In the case of fiscal policy even longer lags may be involved-as long as two or three years in the case of a public works program. An anti-depression program might well come into full effect just in time to accelerate a lively inflation.

Third, fiscal and monetary policies have not demonstrated much effectiveness in dealing with cost-push inflation, that is, inflation initiated by the pushing up of wages more rapidly than the rise in productivity, and to a lesser extent by the raising of administered prices of materials and other cost items.

Fourth, fiscal and monetary policies may not be powerful enough in themselves to maintain economic stability in the presence of strong shocks from the outside, such as hot or cold wars.

Despite their defects, however, the instruments available are reasonably adequate to avoid major instabilities that arise in the normal operations of the national economy.

Let us turn to the second condition for economic stability; that policy-makers must be able to determine when and with what force to apply the various stabilization measures.

There are two kinds of requirements for knowing when, and how forcefully, to apply monetary and fiscal policy. One requirement is adequate information about the ramifications of our highly complex economy. Today the information is far superior to what was available in 1929. A whole system of national economic accounts has been developed which greatly enlarges our grasp of the operation of the economy.

There still remain, however, many gaps in the information called for by this system of accounts. Many figures that are needed quarterly or more frequently are available only annually. The figures in some of the statistical series are unreliable because of inadequate sampling. These defects are due to lack of money. Congress, despite urging, has been niggardly in providing the relatively small amounts required.

The second kind of requirement is good forecasting. Even with the best of statistics, economic forecasting is likely to remain an art rather than becoming a science in the foreseeable future. Despite lapses, however, government economists in the main continue to chalk up a very acceptable record. Their knowledge is probably sufficient to permit the prevention of serious depression and serious inflation in the absence of very powerful forces outside the normal operation of the economy, such as war.

There remains the question of whether our policy-makers and the public whose support they require have the will and courage to carry out stabilizing policies.

We are clearly better off in this respect also than we were in 1929, at least in dealing with downward business movements. The public learned a good deal from the depression and was freed from some economic superstitions and inhibitions. If anything, it is prone to call for action that is not necessary.

Nevertheless, timely and vigorous action even to offset downward movements is not assured. Recovery always seems about to take place—"prosperity is just around the corner." Some persons in official life do not believe in fiscal policy; they do not accept deficits as a means of

promoting recovery. Those who do accept fiscal policy regret giving up the balanced budget because of its symbolic power in promoting fiscal responsibility. Moreover, tax reductions, which are the most readily available fiscal policy measure, are virtually irreversible in practice; they must be used sparingly if they are not to contribute to future inflation.

This suggests the crux of the matter. Economic stabilization is a twoway street. If there is to be stimulation of the economy in recessions. there must be offsetting restrictions in inflation. If there are to be deficits in some years, there must be offsetting surpluses in others. Policymakers may be reluctant to take vigorous steps to stop downswings because they fear, with justification, that they will not have public support in halting inflationary movements. Buyers as well as sellers are annoyed by restrictions on purchases that result from the tightening of credit. Escalation of prices and wages is built into many kinds of transactions, notably farm parity prices and wage agreements. Everyone is annoyed by tax increases. We have yet to see an increase in taxes adopted as an anti-inflationary meassure at a time when the Treasury was anticipating a balanced budget or a surplus.

Public support of anti-depression measures is likely to be strong, but we need equally firm support for anti-inflationary measures, if we want to realize our national policy of economic stability with growth.

Roy Blough.
SATURDAY REVIEW,
January 18, 1958, p. 49:2.

## BUSINESS TRAVEL—

T BUSINESS AIRCRAFT'S remarkable rate of expansion (about 25 per cent in 1956) there may soon be a plane parked outside every plant in the country.

Not counting crop dusting, pipeline inspection and allied tasks, about 25,000 aircraft now fly on company business. These range from fourengine planes, costing hundreds of thousands of dollars and operated by professional crews, down to singleengine jobs costing \$10,000 and flown by the sales manager. Some companies find themselves in possession of burgeoning fleets which they must operate like airlines, on fixed schedules. General Motors maintains 26 airplanes: Socony Mobil, 29. More than 90 of the country's largest corporations have planes, in addition to hundreds of smaller ones.

With the demand for the executive airplane, there has grown a brisk trade in refurnishing standard airplane interiors for the convenience and comfort of the flying tycoon. Among the features available for the most substantial planes are air-toground telephone, television, hi-fi, tiled lavatories, bars, divans, and picture windows. To avoid mail from querulous stockholders, some companies use modest lettering on the sides of their planes and others omit identification completely.



Not that there is any doubt among the big companies that their planes pay their way, and more. One factory in three in this country is located in a small town. Regular airline routes have proved inadequate for the executive who must make his way quickly among lesser cities. Railroad service has been deteriorating for years. A flying salesman who had to leave his plane in Akron recently while he rushed on to an appointment in Detroit was dismayed to learn that there is only one train a day between the two cities, and that was at 2 A.M. Gen. Lucius D. Clay, chairman of the board of the Continental Can Company, which operates six planes, wrote recently in the magazine Flying: "We believe that without company aircraft we would need more senior executives to properly supervise our activities, and the additional salaries would pay for a large part of our air transport even if the executives could be found."

The rewards of business flying are

even more apparent among the smaller companies, especially when technical people are involved. An oil-rig maintenance engineer in Texas who recently learned to fly now finds that he makes as many calls in a day as he previously did in a week—often as many as 14. His company is happy to trade in his plane for a new one every year, since he does the work of five engineers.

The multiengine planes in business use are almost invariably flown by professional pilots with military or airline experience; in all, some 5,000 business planes are professionally manned. The single-engine planes are more often piloted by the men who are going to conduct the business at the other end of the flight-salesmen. executives, and technicians. Some of these were fliers in the war who have just now achieved positions of sufficient eminence in the business world to make their voices heard on the airplane question if they are employees, and to be able to afford a plane if they are bosses.

Freed of the burden of supporting an airplane from personal resources, the businessman-pilot can find plenty of part-time private uses for his plane. Even the big companies sometimes use their planes to fly executives to their summer retreats on weekends, a fringe benefit they consider something akin to the ping-pong table in the employees' lounge. (Within reasonable bounds, the planes are a tax-deductible business expense.)

The businessman-pilot is no airhappy youngster. The average age of the 10,000 subscribers to Air Facts, a journal that deals in depth with the problems of business flying, is over

40. It is often not until that age that the businessman finds he has need of a plane. By the time he does, he may not be able to spare the time to learn to fly. The problem is met by plans. learn-while-vou-work which the executive is flown between engagements by an instructor until he is qualified to fly alone. A salesman who used to drive all day to reach the town of his appointment for the following morning can now make morning and afternoon appointments hundreds of miles apart by spending a couple of hours a day in the air. Some airports have conference space right at the field for the really busy executive.

Among the myriad business uses for which the airplane is kept flying today these random samples present themselves:

The Seneca Falls Machine Company flies customers to its plant, in Seneca Falls, N. Y., to observe their machinery in operation before it is shipped.

Aramco, the oil company, shuttles its employees and their families between the United States and Saudi Arabia.

An Elizabeth, N. J., photographer named Ben David takes pictures from the air of vast industrial complexes, for board rooms and real estate brokers.

Reed W. Scott, superintendent of meat operations for the Food Mart, flies among the chain's sixty stores in Texas and Mexico.

The Dixie Aluminum Company transports personnel between its two plants, one in Rome, Ga., and the other in Hattiesburg, Miss.

Airplanes fly lumbermen over

stands of timber they are surveying, hillbilly artists from one backwoods engagement to the next, emergency parts to the machines that need them, and customers on fishing trips to Canada. In the West, doctors, prospectors, and ranchers are airborne. Two-thirds of the country's private planes are based west of the Mississippi, where only a third of the population lives and the spaces are accordingly wide open.

The safety record of the professional pilot who flies the large corporation aircraft, according to Jerome Lederer, managing director of the Flight Safety Foundation, is about the same as that of the airline pilot. His salary is competitive with the airline man (ranging up to \$20,000 a year), and his plane may be more promptly fitted out with the latest safety devices, since the man who approves the expenditure is also his principal passenger.

The businessman-pilot's safety record is not quite up to the professional pilot's, but it is distinctly better than that of the pleasure pilot, whose plane is not so well equipped for safety and whose psyche may not be as attuned to caution. Lederer attributes the gradual improvement in the safety record of general aviation in part to the increasing maturity of pilots.

Aviation safety experts have been campaigning for wider instrument instruction among private pilots to equip them for dealing more effectively with the weather, still their implacable foe. In addition to the matter of safety in adverse weather there is the problem of being blocked off from that important appointment.

Fog or a blizzard or thunder squalls can prevent a landing at Chicago and a man finds himself in Buffalo. Or he is in Buffalo and can't get out of it. His plight is even worse if he is visiting one of the countryside factories, with no alternate means of transportation. To some degree this handicap applies to commercial airlines, but their better instrumentation and pilot training allow them to fly in weather that the private plane dare not try.

The most critical problem of our expanding use of the airways is the prevention of mid-air collisions. This is linked in the public mind with the growth of the airlines, but with larger airplanes on order to handle their increasing trade, the airlines have probably reached their maximum numerical growth at the current level, about 1,500 planes. General aviation's fleet is 44 times that, and growing at the rate of several thousand planes a year. The Curtis Report, an exhaustive study of our air traffic problem commissioned by the President and published last spring, recommends a drastic overhauling of the antiquated system for controlling our national airspace. Without these measures, the report warns, "we shall witness the slow strangulation of the most buoyant element in our national existence."

Happily for the air businessman, however, the Curtis Report assures us that under intelligent regulation, "there is no shortage of airspace for any demand that can now be seen."

Gordon Cotler.
THE NEW YORK TIMES MAGAZINE,
December 8, 1957,
p. 48:4.

Despite rising costs and shrinking profit margins, not many manufacturers plan to boost their prices in 1958 . . .

### Industry Keeps the Lid on Prices

Most of the Nation's industrialists are planning to hold the line on their prices this year, judging from interviews with more than 50 delegates to the recent National Association of Manufacturers convention.

Most of those questioned expect wages to go up, though the rise may be smaller than in recent years. However, manufacturers report that the prospect of sharper competition and some sales declines means they probably will not be able to pass on higher wages and other added costs in the form of price increases. The expected result: slimmer profits.

Manufacturers' pricing plans contrast sharply with those outlined at the NAM convention a year ago, when about half of the members surveyed reported definite intentions to boost prices. This year, only a handful said they had such plans.

About a third predicted their sales will fall in the opening quarter and probably will slide off for the full year; another third believe their sales will hold about even for the year, while the rest expect some gain.

Most manufacturers interviewed were in agreement on 1958 price policies.

"We were going to raise prices, but now we don't think we will, in view of the sales drop expected this year," reported Lutillus Nelson, president of Nelson Iron Works of Seattle, Wash. Albert K. Chapman, president of Eastman Kodak Co., said his company "doesn't foresee any major price changes in the near future," though it's "optimistic" on 1958 sales prospects.

Competitive pressures were emphasized by George O. Renner, president of Milwaukee's Renner Manufacturing Co., a steel fabricator selling to power shovel and machine tool builders. His company cut its prices 2 per cent last year, and sees little chance of getting them back up in 1958, although it expects its own sales to hold firm. Business is bad among some of his competitors, Renner explained, and "some fabricators will take just any price to get orders and keep working."

S. Ernest Kulp, Sr., vice president of Masland Duraleather Co., Philadelphia maker of vinyl upholstery materials, said he sees no reason to raise prices this year, because "we're getting very good efficiency in production." Another reason: "Competition wouldn't let us raise prices even if we wanted to."

A few manufacturers fear their prices actually will drop J. Ellis Crosby, owner of Putman Lumber & Export Co. of Jacksonville, Fla., reported that "lumber is not stable, and prices are soft now on the West Coast." Methuen International Mills of Methuen, Mass., looks for a drop of about 4 per cent this year in prices of its worsted fabrics, partly because of a recent sag in the raw wool market.

A small number of industrialists, of course, do plan price boosts. Among them is Roy G. Lucks, president of huge California Packing Corp., San Francisco producer of Del Monte brand canned foods. He expects "moderate increases on some items as a result of the progress the industry has made in cleaning up inventories" that held prices down last year.

Cohoes Carry Bag Co. of Cohoes, N. Y., maker of paper bags for department stores, raised its prices 4 per cent at the end of 1957 and president Harold I. McMillan looks for another increase of about the same size this year. The cost of paper "keeps going up," he complains.

While most industrial leaders figure their sales will falter in the early part of 1958, many think their volume—and business generally—will turn up later in the year. Even those who look for declines emphasize that their operations still will be at relatively high levels. "We expect to have a good year even though our sales may be about 10 per cent below 1957's volume," asserted H. G. Bixby, president of Ex-Cell-O Corp. of Detroit, which turns out aircraft parts, machine tools and dairy equipment.

A decline of about 5 per cent in his company's sales volume for 1958 was predicted by Frank F. Elliott, chairman of Crane Co. of Chicago, a major producer of valves and fittings as well as boilers, radiators and bathroom equipment. He attributed this prospect to "a slackening in industrial construction; for instance, large oil companies' capital expenditures seem to be leveling off."

A few manufacturers believe their sales charts in 1958 will show deeper dives—at least in the early part of the year. For instance, John W. Perry, Jr., vice president of Grede Foundries, Inc., of Milwaukee believes his firm's volume will decline 20 to 25 per cent in the first quarter because "road-building equipment makers have not been moving their equipment as fast as they had expected."

Some, however, saw a brighter outlook for their 1958 sales volume. For example, new government spending on missiles is counted on by Joe J. O'Connell, president of Machine Engineering Corp. of Albuquerque, N.M., maker of aircraft and missile parts, to boost his 1958 sales 10 to 15 per cent over 1957.

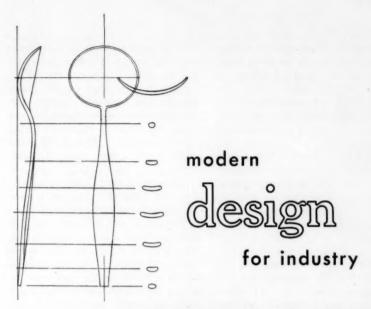
Companies unhappily contemplating profits declines next year include Wolverine Bolt Co. of Detroit, an auto company supplier. "We're caught in a squeeze between higher labor and steel costs and customers' resistance to price increases," explains controller Charles R. Allberry.

Among the few manufacturers hoping for an earnings advance in 1958 is Smith Welding Equipment Corp. of Minneapolis, which expects to boost profits this year with "improved products and techniques."

■ Victor Hillery and George Church.

THE WALL STREET JOURNAL,

December 9, 1957, p. 1:2.



OUR PRODUCTS AND THE MEN WHO SHAPE THEM

How can the Air Force be sure that chairs at its new Colorado academy won't topple backward when an officer's sudden appearance snaps cadets to spine-stiffening attention?

How can a manufacturer get people to buy a perfectly efficient lawn sprinkler that no one seems to want?

How can 71 passengers be seated in living-room ease in an airliner originally designed for 66?

For effective solutions to problems like these, and thousands more, U.S. business turns to a group of men who in 30 years have done much to change the face of industry—its products, the factories that turn them out, the machines that fashion them, and the work habits of the men at the machines. They are the nation's

industrial designers, and for their solutions to such problems industry spends at least \$500 million a year.

The skills sharpened by tasks like these were never more important than right now, when manufacturers are feeling the pinch of rising costs and slipping sales. A fresh style touch, a label to catch the housewife's eye, a cost reduction through simplification of product or operation—any of these may be just the weapon a company needs to help win the sales battles now shaping up.

There is already impressive evidence of the near-miracles industrial designers can perform. Scovill Manufacturing Co. of Waterbury, Conn., for example, handed Chicago designer Dave Chapman a lawn sprinkler that was gathering dust on dealers' shelves.

"We found that people weren't merely worrying about a tool, but about what their neighbors thought," Chapman recalls. "So we spruced up the sprinkler head and painted the whole thing white. In a year when sprinkler sales were off 15 per cent, Scovill had an 85 per cent gain."

After Raymond Loewy redesigned Sears, Roebuck's Coldspot refrigerator in 1934 (he shifted the motor from the top to the bottom, installed aluminum shelves to eliminate rust, and smoothed its lines), sales jumped from 60,000 to 275,000 a year. American Export Lines president John Slater warned designer Henry Dreyfuss to watch maintenance costs in designing interiors for the liners Constitution and Independence. One cost-cutting touch: beds that a passenger can put into sleeping position at the push of a pedal, thus permitting the line to get by without a full shift of night stewards.

How do designers work these wonders? "The basic law of industrial design," Loewy says, "is simplification. Therefore, good esthetic design usually leads to better performance." Simplification in design can also mean fewer parts (and correspondingly less labor) or less weight (and lower freight costs).

All designers need that intangible ability that enables them to see an angle others may miss. Loewy calls it following a hunch. The Germans term it "fingerspitzengefuhl" ("feeling with the finger tips").

But this intuition seldom produces magical, instantaneous answers. Dave Chapman, for instance, was asked for advice when Brunswick-Balke-Collender, manufacturer of bowling and billiard equipment, decided to diversify. One new field that suggested itself was school furniture. But before putting the first chair on the drawing board, Chapman spent nine months questioning teachers ("Should chairs be bolted to the floor?") and school repairmen ("How badly can a child wreck a fine piece of furniture?").

In some cases, the designer's probing may force the client to reverse his field. Loewy was asked to lay out a fancy new store in a southern mill town to match a new competing outlet. After he found that the store's customers were mostly mill hands, Loewy's advice to his client was to ignore the country-club set and build up a big bargain basement in he old store.

Today's designers can work to any scale. Boeing, for instance, needed a mock-up of the cabin of its new 707 jet transports. Veteran designer Walter Dorwin Teague put together a \$500,000 replica that lets prospective customers of the \$5 million airliner experience everything but an actual take-off. Hostesses glide down the aisles; the coffee machines work; lights dim and "stars" gleam at the windows; tape recordings supply the song of the jet engine. "I believe that all products should be shown complete, and in use," Teague explains.

Not many products, of course, need such Cecil B. De Mille touches. Henry Dreyfuss can convey the lines of a new plumbing fixture with a sculptured clay model, a new telephone with a plaster cast. Loewy needed only half a dozen dummy cigarette packages (and a \$50,000 fee) to convince American Tobacco's

George Washington Hill that Lucky Strike green should go to war.

The exterior look and "feel" of a product is still the designers' main concern. But many now are working far behind the scenes. One client wants Dave Chapman to redesign its motors even though, he points out, "80 per cent of their product is covered up—invisible." Loewy adds that purchasing agents as well as consumers are appreciative of a good-looking product.

Among designers, not surprisingly, there is a general self-satisfaction that good industrial design has done its bit to raise the level of American taste. Certainly it is true that anyone who has lived through the era of vacuum cleaners that looked (and sounded) like threshing machines, the dripping icebox, and ear-trumpet radios, has been affected by the transition to the simpler, smoother, functional lines of their modern counterparts. Although he frets over the uniformity he sees overtaking many products, Henry Dreyfuss is reasonable happy about the past 25 years. "It is hard, for instance," he says, "to find a beaded lampshade in any store today."

■ John A. Conway. Newsweek, November 25, 1957, p. 105:3.

#### New Peak for Mutual Fund Investments

INVESTMENT COMPANIES established new records in several categories in 1957. A net gain of 400,000 investor accounts holding investment company shares brought the total to a new high of 3,300,000 at the year end, according to Edward B. Burr, executive director of the National Association of Investment Companies. Moreover, investors bought a record \$1,420,000,000 worth of mutual fund shares in 1957, breaking the previous high of \$1,346,738,000 set in 1956.

While these purchases were increasing, the redemptions—or cash-ins—by investors of fund shares dropped to a new low as a percentage of mutual funds' total net assets. The percentage of redemptions last year was 4.6 per cent compared with the previous low in 1956 of 4.8 per cent. In dollars, the redemptions totaled \$420,000,000, compared with \$432,750,000 in 1956.

The total net assets of all investment companies were at a year-end high of \$10,500,000,000. However, because of the decline in the prices of common stocks which began last July, total net assets were lower at the end of 1957 than they were at the mid-year.

-New York Herald Tribune 1/2/58

THE ART OF PROGRESS is to preserve order amid change and to preserve change amid order.

-Alfred North Whitehead

A company manufacturing only one product may soon find itself at a competitive disadvantage in today's changing market. Here are some of the reasons . . .

## Why Companies Diversify

THE ONE-PRODUCT COMPANY appears to be going the way of the one-crop farm as more and more corporations discover the advantages of diversification. By spreading the economic risk, diversification can provide more security, stability, and opportunity for company growth.

However, your company may not need another "crop." You may be able to do a better job with one product. If you are thinking of adding another product to your line, stop to ask yourself some important questions: Have I done all I can with my present product? Could I get new ideas by talking to retailers and consumers? Would a new package increase sales? Is my product really as seasonal as I think it is? Will my salesmen neglect the established product in favor of the new? Is the new product as good as I think it is? Will my product open a whole new set of wants? Will diversification result in greater profits than concentration on my present product?

One of the more important marketing reasons for diversifying is the need to replace obsolete lines. Twenty-five years ago, the Knickerbocker Ice Company of New York saw mechanical refrigerators cutting into their profits. Knickerbocker didn't stop selling ice. They protected themselves by going into the laundry business, which best fitted the system for local delivery and pick-up they already had.

Some companies have found that their engineering skills and production facilities could easily be used on other products. General Motors started producing electric refrigerators and contributed to the radio and aircraft industries in the 30's. Duproduces explosives, lacquers, artificial fabrics, film. The old Remington Company produced cutlery. cash registers. typewriters and firearms. The Borden Company markets mince-meat, ethical pharmaceuticals, and chemicals as well as dairy products.

General Mills has 44 per cent of its sales dollar invested in flour, 14 per cent in formula feeds, 30 per cent in package foods, and 12 per cent in chemical and mechanical products. United Fruit is going into the oil business.

Broader markets can also be obtained by diversifying within your product line. Philco, for example, offers its customers a wide range of merchandise, models, and prices to choose from. Starting with the pro-

duction of storage batteries, the company went into the manufacture of radios in 1928, air conditioners in 1939, and later freezers, television receivers, and electric ranges.

Many companies diversify to meet new marketing demands. The Hamilton Watch Co., founded in 1892, recently diversified to by-pass Swiss competition and the low tariff rate. Its Allied Products division manufactures fuses and timing devices for guided missiles and rockets. The division also applies watch-making skills and techniques to making miniature assemblies for industrial and military use.

Hamilton spends 3 per cent of its total sales dollar on research and development for old and new products. Only 50 per cent of present income is derived from the original product: watches of domestic manufacture.

If your company name is a byword in the minds of the consuming public you can use it to good advantage in diversification. Women's clothing manufacturers have introduced perfume and cosmetic lines under their already well-known brand names.

National Distillers & Chemical Corporation diversified because, as one executive remarked, it didn't want to put all its eggs in one whiskey bottle. It bought U.S. Industrial Chemical Co., and now manufactures industrial alcohol, basic chemicals used by other manufacturers, and polyethylene. Going into the special metals field, it developed a patented process for refining zirconium and titanium. In addition, it has a plant in Illinois which ex-

tracts hydrocarbons from natural gas for polyethylene and ether. No new sales force had to be trained to sell these products, since an experienced staff was inherited from U.S. Industrial.

Your own specific problems and opportunities must guide your decision on diversification. Do you need a new product to help stabilize a market? Will diversification help your corporate tax structure? In time of recession, will a new line of products help or hinder your marketing operation? Is diversification the only method that can aid you in maintaining leadership and meeting price competition? Can you achieve greater financial control of your business by avoiding cyclical changes? Do you need to upgrade your basic product to a higher unit price? Is government anti-monopoly activity serious enough to warrant expanding into a different product line?

If you do decide to diversify—take care. Don't make any hasty decisions. An increase in competition, which is the end result of diversification, means that in the long run very little of the consumer's dollar is spent in any one industry. Such competition can also foster price wars and other damaging policies on the part of established manufacturers. You may even increase your distribution costs so much that you fail to profit.

Play the game with the rules: find a need for your product, get a competent sales organization, and advertise thoroughly.

> PRINTERS' INK, November 8, 1957, p. 44:3.

## Capital Spending: Slowdown in Sight

AFTER AN UNPRECEDENTED SPLURGE of capital spending in the past few years, it looks as though business will pull in its horns a bit. However, even with a contemplated over-all reduction of 7 per cent in 1958, capital spending will still be on a very high level—a good 20 per cent higher than actual spending in 1955. Moreover, most companies plan to maintain or increase expenditures on research and development in 1958, and about one third will base substantial 1959 capital expenditures on the results of their research programs.

These are the highlights of the preliminary survey of Business's Plans for New Plants and Equipment recently completed by the McGraw-Hill Department of Economics. In the past, these preliminary surveys have accurately shown the trend of capital spending.

The contemplated drop in 1958 capital expenditures is concentrated in manufacturing—where plans call for a 16 per cent reduction. Offsetting this is a planned increase of 3 per cent by electric and gas utilities and small increases by the petroleum, transportation (other than railroads), and communications industries.

Capital spending will hold up relatively well in the chemical process industries. According to plans, spending will be up 5 per cent in petroleum refining and off only 4 per cent in chemicals, 7 per cent in rubber, and 9 per cent in stone, clay, and glass. However, large declines are reported for the basic materials industries: 24 per cent for steel, 38 per cent for nonferrous metals, and 24 per cent for paper and pulp. In metalworking, planned spending is off sharply. The auto industry plans to spend 30 per cent less this year, and other transport equipment makers are cutting investment 16 per cent.

According to present plans, the drop in capital spending will come to a halt in 1959. Only 23 per cent of the companies reporting now plan a further reduction in capital spending for 1959; the rest plan to maintain or increase expenditures.

#### Truck Leasing Catches On

LEASING—already a well-established practice in such fields as office equipment—is now gaining a solid foothold in trucking. Although the number of trucks rented or leased in 1956 was only 225,000—or about 2 per cent of the 10 million trucks registered in the country—this was double the figure for 1955, and many veteran truckers believe that leasing represents the industry's area of greatest potential growth.

Particularly advantageous to new companies is the fact that leasing eliminates the need for heavy capital investment in trucks. Moreover, the cost of the trucking operation can be determined in advance almost down to the penny. All charges are tax-deductible as ordinary costs of doing business, and many financial records can be eliminated.

-Indiana Business Review 11/57



# Business Cracks Down on Costs

ACED WITH narrowing profit margins, executives all over the U.S. are wielding the sharpest shears they can find in an all-out effort to cut their current costs of doing business.

Usually, a company's cost-cutting program starts in the manufacturing operation, where direct costs can be attacked, but it soon sweeps through the company to tear at overhead in any form—phone bills, expense accounts, unnecessary jobs, and paperwork. Plans for combining operations, which until now the company has been too busy to attempt, are dusted off—and sometimes implemented.

The new wave of cost cutting now gaining force bears some strong resemblances to its predecessors. But there are new factors at work, too. So far, for example, few companies are wielding the ax on research or sales. Almost without exception, in fact, companies with research programs are putting more money into them, not less. As one company head

explains, "That's where our products for tomorrow are going to come from."

Sales expenses, by and large, are also unscathed up to now. The salesmen are "the boys who bring in the money," as one executive puts it.

There's hardly another area, though, that's exempt from the eager search for savings—a search that frequently breaks new ground.

New processes and product changes that save pennies and dollars are getting fresh emphasis. For example, Virginia Metal Products Co. (Richmond, Va.) cut \$90,000 from its \$400,000 yearly paint bill by switching to a newly developed steam spray for its portable office panels. Diamond T Motor Car Co. set up a special manufacturing research group that reviewed production methods and came up with 850 product changes (mostly minor) that have saved an estimated \$100,000 in yearly production costs.

In order to stimulate cost consciousness on the grass roots level and dig out new ideas for saving, some companies use poster and propaganda campaigns. A few go beyond that to courses in production methods for foremen. American Machine & Foundry Co. ran a work simplification program for foremen in six plants, saved \$215,000 in annual production costs, and is now extending the program to eight more plants. The project paid off with 5,000 usable suggestions for improvements.

After companies run out of ideas for slicing plant costs, they usually move in on overhead and office costs. The signal for the invasion of the office is traditionally a series of little memos to employees to watch their phone calls. One Pittsburgh company now lists on the bulletin board any long distance calls-including the president's-lasting more than ten minutes. Weatherford Oil Tool Co. (Houston) says it cut its monthly phone bill nearly in half by using an interoffice teletype system, and a number of other concerns have found that leasing their own private telephone lines can be a money saver.

Other approaches to overhead pruning reported by executives are the combining of jobs, delays in hiring new people, and trimming of advertising or public relations budgets.

Office management has also taken a leaf from the factory's work simplification book. The Dime Savings Bank of Brooklyn boasts that a work simplification program—run by a New York University professor and consultant, and taking in everybody from top company officers down to supervisors—resulted in a substantial number of cost-saving improvements in work flow and organization.

New equipment can also achieve major savings. A midwestern utility says it saved \$10,000 by using a duplicator to replace three typists. Fish Engineering Co. (Los Angeles) set up its own print shop for its reports and cut at least \$30,000 from a \$100,000 annual bill. Commonwealth Edison Co. (Chicago) expects its giant computer installation to save it \$750,000 a year in clerical costs.

But big equipment can make costs jump, too, if it's not utilized wisely. Pathe Color, for example, overdid it by renting a whole roomful of office machines for a total of \$1,800 a month. It took another look—then bought two special adding machines for \$2,400 which provide all the accounting and cost information needed.

Many companies are having a fresh look at communications and paperwork—but here savings are harder to measure in dollars. And, as one executive vice president complains, "It's like hacking your way through a jungle for a month. Come back a year later and the undergrowth is as thick as ever."

That's the difficulty with all costcutting programs—keeping them going after the first enthusiasm wears off. Continuous emphasis on cost cutting, one consultant in the field thinks, can be stimulated in two ways: (1) some form of personal incentive (a bonus or a sharing of the savings) in the key spots where costs can be controlled; and (2) almost daily distribution of comparative information on costs to such key spots.

Circulating up-to-date cost data where it counts, however, is easier

for a small company than for a large Transal Engineering Corp., producer of electronic equipment and radio gear (annual sales, \$2 million), has been able to use this technique because it has ten separate assembly lines for different products, relatively long runs, and a simple assembly task. It jacked up its profit rate from 5 per cent or less to 12 per cent by means of daily cost reports to the ten foremen. Every day, each foreman gets a statement telling him in dollars and cents whether his operation is in the red or black, if it was on schedule the previous day, and where he stands on his contract. These daily statements replaced month-end reports that usually came too late for action; by the time a foreman realized something was wrong the damage was already done.

In a larger company with a more complex production setup, this type of control is next to impossible (though computers for cost accounting do help). So some larger companies turn instead to standard costing and the setting of specific savings goals for divisions and departments.

Westinghouse Electric Corp. divisions set up cost reduction programs for a year at a time, figure out what manufacturing improvements will be needed, and then are held accountable for reaching their goals.

Johns-Manville Corp. says it has racked up savings of from \$5 million to \$8 million a year by similar methods. Now, faced by shrinking opportunities for cost cuts in production, the company is setting up a special organization to keep the savings pot at a permanent boil.

Recently it announced the establishment of a special Administrative Services Dept. under a newly appointed vice president. The new unit, which includes a group of office methods men, will coordinate attempts to cut paperwork, take the various tabulating departments under its wing, and handle all office maintenance and allocation of space.

Already, a pilot study of paperwork in a Johns-Manville sales office has resulted in eliminating some reports and shortening others. The new Administrative Services Dept. is now seeking to stem the paperwork flood on the interdepartmental and interdivisional levels. Its ultimate aim is to lock the whole accounting and reporting system into one fast-paced unit—and keep it there.

Business Week, September 7, 1957, p. 77:4.

STANDARD OIL CO. (INDIANA) has come up with an unusual solution to the problem of informing employees how the company is doing without boring them with complicated written reports. Any employee who wants to know about the company's annual report only has to pick up the phone and dial a special number. He gets the highlights of the report via a one-minute message which has been recorded by the local company manager.

-Printers' Ink

Hundreds of millions of dollars are stolen every year by dishonest employees. Here's what management can do to stop embezzlers—

## THE TRUSTED THIEVES

S OME AUTHORITIES say a million businessmen are victimized by embezzlers every year. In 1956 alone, at least \$500 million in money and property was stolen by dishonest employees. A few experts claim this figure is much too low, and that \$1 billion is a better guess at the annual embezzlement loss. And one expert suggests that \$3 billion is the real total.

All such estimates are little more than slightly educated guesses. The crime of embezzlement is rarely reported to the police—and often, of course, it is not even discovered. Yet it is demonstrable that white-collar workers are more proficient in crime than the professional criminals. The FBI calculates that all the nation's burglars, pickpockets, armed robbers, and auto thieves managed to steal only \$440 million in 1956. Embezzlers, by the most conservative guess, topped the lot of them by at least \$60 million.

One thing is certain: the amount of loss is rising yearly, and much faster than the amount of money in circulation. Fidelity insurance losses climbed 250 per cent from 1946 to 1956—while insurance in force went up about 70 per cent. Banks alone in 1956 had known losses of some \$9 million—just about the combined total for the two preceding years. And one group of bankers estimates that undiscovered losses total an additional \$10 million to \$25 million. Last year three banks had to close their doors, and at least 200 companies were forced into bankruptcy by fraud.

In an economy where retail and wholesale trade alone amounts to some \$650 billion, these figures may not, to be sure, seem economy shaking. They may, in sum, look like relatively small seepage. But where the losses fall, they hurt. And there does not seem to be any effective prevention in the making.

One fact helping to obscure the problem is the rather fretful reticence of most American businessmen in talking about the thief in the white collar. For this particular lawbreaker, who usually dresses well and has pleasing manners, rudely jars the notion that the middle-class American is always meticulously honest. And executives, managers, and business

owners vastly prefer to live with the assumption that the man down the hall simply would never take a penny that didn't belong to him. It is not only pleasant to believe this; a number of companies feel that in the long run it may be just as practical to submit to occasional embezzlement losses as to set up elaborate and time-consuming systems of protection.

For all the variety of embezzlement schemes, simplicity often suffices for one reason: the embezzler is a trusted man. The typical defaulter is in his thirties, is married, and has one or two children. He lives in a respectable neighborhood, drives a mediumprice car, and once in a great while travels on the weekend. Whatever his secret life, he usually looks like a good mixer and is active in the community: often as not, he's a church officer. Temperately, he takes an occasional drink. Usually he's had a couple of job promotions, partly because he's been around the firm for a while, and partly because he has slightly better than average ability, works hard, and seems willing to accept responsibility. In one study of 1,001 cases, 270 of the embezzlers held supervisory or executive jobs.

What can responsible management do to stop these thieving employees?

Some answer: "More prosecution."
Certainly there is very little now.
Only about one out of ten discovered defaulters is ever brought into court, and many of these receive light or suspended sentences. In most cases the bonding company is notified, some attempt is made to get the defaulter to make good the loss, the man is fired, and that is that. As one auditor, whose firm handles the books

of many large corporations, explains: "Of the hundreds of thefts we've discovered during the last year, more than three-quarters have been hushed up. Why? Well for one thing, employers are afraid that the publicity attached to prosecutions will give their company a bad name. Another reason is that many companies assume they'll lose a certain amount every year through the dishonesty of their employees and let it go at that."

Another important reason for not prosecuting is "flareback." Embezzlements are often complicated, hence difficult to explain to a jury. And many executives fear the possibility of a jury returning an acquittal, thus leaving the corporation open for a civil damage suit.

Since, in the opinion of many businessmen, prosecution is both distasteful and of debatable deterrent value (for no embezzler expects to get caught), it would seem prudent for business to practice every possible precaution. This would mean being at least as vigilant about embezzlement as about fire: watch for dangerous situations, install an alarm system, and keep the insurance in force.

This much is rarely done. Many businessmen seem carelessly to provide temptation—and even hire those most likely to be tempted. Some employers justify rather lax investigation of new employees on the ground that embezzlers are not repeaters anyway. Statistics are too fragmentary to prove or disprove this generalization—but plenty of embezzlers do repeat.

When individual bonding was common, the fidelity companies could be expected to check an employee's background, at least on a spot basis. Today, blanket bonding, which is simply fidelity or honesty insurance, constitutes the bulk of the business and the surety companies are content to buy a pig in a poke.

Besides overlooking obvious danger signals, management often places undue confidence in its alarm systems. The principal alarms for embezzlement are the accounting system and the auditor. Both, for this purpose, are overrated. Most large embezzlements are hidden in accounting systems, remaining hidden through one audit after another. The internal accounting systems are not primarily

established to detect fraud, and auditors can't audit what they can't find. More embezzlements are discovered by good luck than by good accounting.

But no prudent manager discounts these accounting controls or audits. As Herman W. Bevis, partner at Price, Waterhouse, explains: "The primary value of internal controls is in preventing fraud through discouraging the weak employee from yielding to temptation. No one can assess the extent to which internal controls have succeeded in doing this."

■ FORTUNE, November, 1957, p. 142:6.

## All the Comforts of Home?

How FAR should a company go in providing personal conveniences for its employees? A recent survey by American Business gives an interesting look at the policies of 118 companies in regard to such matters of employee convenience as personal phone calls to and from employees, distribution of personal mail, and visitors for employees.

On the question of telephone calls, there is a sharp difference between policies for plant employees and those for office workers. Only 14 per cent of the companies permit plant employees to receive incoming calls at all times, but an overwhelming majority of 82 per cent permit such calls for office employees. Almost half (43 per cent) of the companies restrict plant employees to receiving emergency calls only; a mere 10 per cent have such restrictions for office employees. Approximately the same percentages apply to policies on outgoing calls.

Personal visits from outsiders during working hours are permitted—but discouraged—for plant employees in 42 per cent of companies and for office employees in 62 per cent. About half (45 per cent) restrict their plant employees to emergency visits, and 18 per cent place a similar limitation on their office employees. Other companies have various restrictions on personal visits for both office and plant employees.

Over 92 per cent of the companies deliver personal mail to employees along with the regular company mail. Of these companies, 32 per cent open up personal mail along with company mail unless it is marked "Personal," while 68 per cent do not open personal mail under any circumstances.



# How Reliable Is the Consumer Price Index?

() NE OF THE MOST FREQUENTLY cited U.S. economic statistics is the Consumer Price Index, commonly (and erroneously) referred to as the cost-of-living index. Some 4 million workers have their wage rates tied directly to the index, and the wages of the other 17 million in manufacturing and transportation are indirectly affected by the competition for manpower. According to Ewan Clague, commissioner of the U.S. Bureau of Labor Statistics, which prepares the index: "A single point increase can run up wages in the U.S. by \$160 million. So much money changes hands that you have to have high standards of accuracy."

But there is a growing suspicion among economists and businessmen that the accuracy of the index leaves a lot to be desired. In the first place, the index is not supposed to be a true measure of the cost of living. As the Bureau of Labor Statistics points out, it is only a measure of what families in the under-\$10,000-a-year bracket, living chiefly in cities, pay for the "market basket" of 300 goods and services that such representative families presumably buy. The index shows the price increase since 1947-49, the base period, but no economist regards it as reliable except for the short run.

Over the long range, the index cannot be an accurate indication of the cost of living because family buying habits change. BLS tries to revise the index to take such changes into consideration, and since the modern index was developed 22 years ago, a score of the 200 original items have been dropped and more than 100 added. But it is almost impossible to make completely satisfactory substitutions. In the 30's, BLS sampled prices for kerosene (for cooking), ice, and one-piece union suits, all among the items since dropped. It did not include tablecloths, draperies, bedspreads, baby foods, facial tissues, and shampoos, among scores of items since added. And no real study has been made since 1952 to find out whether the 300 goods and services still account for the same relative shares of family spending as BLS decided they did then.

Until the 1950's, BLS also assumed that most of its families were renters. It now checks prices of new houses, interest rates on mortgages, and home improvements. But it ignores the doit-yourself trend, thus assuming that labor is hired at union wages to paint the dining room, sand the floors, or reshingle the roof. Other changes in the index do not reflect higher prices, but higher standards of living. The index now includes dinners out, hotel and motel rates on vacation trips, the expense of keeping more informal clothes (in addition to work clothes and Sunday best), plus outlay for sports equipment, whiskey, and even from time to time a lawyer to look after the family's property. It also samples prices for late-model used cars, such as many families now keep for a second car, and is giving serious thought to adding power tools, home freezers, air conditioners, outboard motors and pleasure boats to the television sets that it already counts as necessities.

BLS officials stoutly defend all such revisions. Unless the index is kept up to date, they say, the list would soon be heavily loaded with items nobody buys. But the real trouble is that such changes are interpreted as price increases instead of being identified for what they are: major upward shifts in living standards.

Even on the narrow issue of mea-

suring prices, the index is vulnerable. Food costs make up 30.1 per cent of the market basket, but BLS does not check food stores on weekends, when most stores run their big sales and do most of their selling. BLS prices appliances in department stores, but not in discount houses, contending that discount prices are not really savings because they do not include delivery or service, although many discount houses now provide both. It asks auto dealers for an estimated selling price, but does not check the deals that hard-bargaining buyers actually get.

The whole field of quality improvement is also outside BLS's reporting system. Today's new Ford, Chevrolet and Plymouth (the makes BLS samples) are superior to higher-priced cars of only a few years ago. But BLS makes no allowance for the fact.

Despite the index's flaws, the Bureau of Labor Statistics gets little support from Congress in trying to improve it. Only last year the BLS tried to resume spot checks in several cities on actual consumer expenditures to see how representative its market basket is. But Congress refused to appropriate the trifling \$115,000 needed. Doing his best with the tools Congress allows him, Commissioner Clague is considering asking Congress for funds to revise the index completely. Many economists believe that such an expenditure would enable BLS to find out exactly how U.S. families spend their money, and thus avoid confusing the cost of living with the cost of better living.

November 11, 1957, p. 110:1.

## College Graduates and Industry

... is the honeymoon over?

D EMAND for engineering graduates is leveling off and fewer nontechnical graduates are being sought, but those graduates who are hired will be getting higher starting salaries than ever. These are the basic findings of a survey of company plans for hiring college graduates in 1958 recently completed by Frank S. Endicott, Director of Placement, Northwestern University.

The survey, published by the Dartnell Corporation, covered 223 large and medium-sized companies which actively recruit college graduates by sending representatives to a substantial number of campuses.

According to Mr. Endicott, the slackening of demand for college graduates is most likely due to the fact that the larger companies are now stabilizing their requirements after having successfully hired enough graduates in recent years to fill their expansion needs. Many smaller companies (those that hire from five to ten graduates a year) are still upping their requirements, Mr. Endicott notes.

The demand for engineering graduates, which jumped 30 per cent from 1956 to 1957, will show no increase this year. According to the survey, 212 companies that hired 5,665 engineering graduates last year will be seeking 5,650—an almost identical number—this year.

A much sharper reversal of trend shows up in plans for hiring non-technical graduates. Demand for graduates in nonengineering fields in 1957 was 35 per cent higher than in the year before. But this year, 212 companies that hired 9,029 non-technical graduates in 1957 are looking for only 7,899. This is a 14 per cent drop which, when averaged out with the figures for engineering graduates, gives an over-all decrease of 8 per cent in the demand for all types of college graduates.

Despite the over-all downward trend, almost as many companies reported an increase in their needs for college graduates as reported a decrease. Out of 212 companies reporting, 80 companies said they will seek more graduates than last year, 90 said they will seek fewer, and 42 said their total needs will be the same as last year. However, the decreases in demand are generally sharper than the increases.

The demand for women college graduates has also dropped this year. The 65 companies that plan to recruit college women will seek a total of 634 graduates; last year these same companies hired 868 college women.

For this year, at least, there will evidently be no reversal in the trend toward higher starting salaries. Based on replies to the survey, the average starting salary for engineers will be \$468 as compared with \$454 last year; for accountants, \$416 as compared with \$402; for salesmen, \$412 as compared with \$398; for general business trainees, \$408 as compared with \$393; and for other fields, \$429 as compared with \$419. The average starting salary for these combined fields will be \$430, an increase of \$19 over last year's average starting salary of \$411.

A number of companies reported that they found it necessary last year to raise their starting salary rates after the interviewing season had begun. However, this tactic did not help them to meet their needs. For example, of 67 companies that raised their starting rates for engineers, only 27 met their needs; of the 100 that did not raise their rates, 52 met their needs.

Respondents to the survey were asked which way they thought the trend in hiring college graduates would go during the next two or three years. A continued leveling off in the demand for college graduates was forecast by 122 companies. A slightly smaller group—88 companies—felt that demand would increase over the next few years. A small minority of 13 companies foresaw a decrease in the need for college graduates.

Most of those who predicted the leveling off in demand indicated that their current expansion is largely completed and that they will now hire mainly for replacement. Some companies based their predictions on the belief that business activity in general would taper off.

Company growth based on the development of new products and entry into new fields was the factor most frequently mentioned by those companies that expect an increase in demand for college graduates. Other factors mentioned were the desire to upgrade personnel, an increasing number of retirements, and a probable increase in defense spending.

Most of the predictions of a decrease in demand were based upon the probable drop in business activity in particular industries. Plans to hire more men with experience were also mentioned.

In the opinion of 114 companies, starting salaries will probably level off during the next few years. However, almost as many companies—101—believe that starting salaries will continue to climb. Only two companies see any decrease in starting salaries in the near future.

Predictions of a leveling off in starting salaries were based on general economic trends and the increased supply of college graduates. "Supply will meet demand" was a common statement. Some companies also believed that it would be easier to hire men with experience.

Companies seeing a continued increase in starting salaries cited the competition for technically trained men, a demand for talented graduates that will exceed the supply, and a continued upward trend of negotiated union rates. Inflation was another factor frequently mentioned.

Of special interest in this year's study of company recruiting policies is a section revealing the relative weight which companies give to various factors they consider in selecting those they wish to hire. The most important single factor, in all fields, appears to be the personality of the graduate, which includes poise,

ability to work with people, appearance, and related characteristics. A good scholastic record is second in importance, and is given particular weight in the engineering and accounting fields. In the field of sales, however, participation in campus activities appears to be considerably more important than high grades.

## Getting Practical About Handicapped Workers

THERE HAS BEEN A SIGNIFICANT SHIFT in the attitudes of many employers toward the hiring of disabled workers. Immediately after World War II, disabled veterans were hired mostly on a charitable basis. Now companies are putting their hiring of handicapped persons on the strictly practical basis of how well they can do the job. The shift in attitude has paid off for both the employer and the physically impaired worker.

During fiscal 1957, the U.S. Employment Service placed 296,700 handicapped workers—the greatest number of any peacetime year. These figures do not include those placed by private agencies or through the state-federal vocational rehabilitation program—which covers "hard core cases" such as paraplegics, victims of cerebral palsy, and others who often require special training and pose special placement problems. In fiscal 1957, about 71,500 workers got jobs through the vocational rehabilitation program, an increase of 5,297 over fiscal 1956. The total number of physically handicapped persons in the work force today is estimated to be between 7 and 8 million.

The growing use of disabled persons by industry can be attributed in large part to the recent tight labor market, just as the first large-scale entry of the physically handicapped into the work force can be attributed to the manpower shortages of World War I. But there's a big difference today. Most employers no longer consider the disabled as "last resort" employees. The National Industrial Conference Board, in a report titled The Company and the Physically Impaired Worker, found that the chief reason for employing the handicapped now is "economic justification as the result of good employer experience in utilizing disabled persons." In simple words, hiring them is good business.

Many employers have adopted this attitude as a result of the efforts of the U.S. Employment Service, agencies such as Just One Break, Inc., and the Federation of the Handicapped, individuals in management and the unions, and such companies as Abilities, Inc., which is staffed from top officers to floor sweepers by the disabled.

-Business Week 12/7/57



## Getting Better Results with Fewer Meetings

Knowing when not to hold meetings can do more than save the time of hour-starved executives. Often, individual responsibility and action will produce more reliable, worthwhile results than a meeting can.

The first step toward reducing the number of full-scale meetings and informal conferences is to set up a list showing which subjects require group discussion and which can best be handled by one man. It may be a delicate matter to tell an executive that he has been calling too many meetings. Circulating a memorandum that suggests careful distinction between subjects for group and individual action will produce the same result without generating resentment.

Here are some of the purposes for which a meeting is either essential or helpful:

 Making a real change of policy that deals with your products, quality, method of distribution, company expansion, personnel, and other basic matters.

Making a decision which may seriously affect the position or prestige of one or more executives.

Developing creative ideas in various areas such as new products.

4. Resolving an exceptionally difficult dilemma that may require a completely fresh approach.

That, short as it seems, should be the extent of your positive list. However, it is not enough to say broadly that all other questions should be handled individually. They must be enumerated to make it clear what should not be dealt with through meetings:

 Decisions dealing with production, distribution, or expansion which come within the framework of established policies.

2. Authorizing expenditures, however important, that fall within budgets already approved. Too many executives have a tendency to seek the additional moral support of a group for their specific purchase decisions, even though the amounts are already provided for.

3. Arrangements with suppliers, customers, or others that do not deviate from the firm's usual policy.

The reading of written reports which have been or can be circulated.

5. The review of technical reports by administrative men who understand only the general ideas behind them. (In one company the top men of each division sit through detailed presentations on technical subjects made by the research engineers. The reasoning is that management must be familiar with progress made and with problems encountered in order to decide what new directions to take. Actually, a brief summary statement by the technical men would be adequate.)

Rubber-stamping of ideas about which the responsible executive has already made up his mind.

In addition to formal meetings, there are the unplanned, informal business conversations that consume an enormous amount of time. Here again, as in the case of full-scale meetings, we start talking in the vague hope that some clear result will emerge from combining multiple confusions. It seldom does. The reverse should be our pattern: to begin a discussion only if we have a definite idea of what must be arrived at and a solid reason for asking others to take part.

Most businesses would benefit from the establishment of two customs:

First, that each man should think his own problems through before carrying them to others. Second, a rule of courtesy limiting the hours when executives drop into each others' offices. It is usually best if this is confined to the afternoon hours, since most men prefer to get correspondence and phone calls out of the way without interruption in the morning. Deviations from the custom should be as few as possible, and an advance phone call should precede them.

Most men agree that these methods of cutting down on meeting and discussion time can save countless hours. But the feeling may linger that something basic will be lost—that the disadvantages of meetings are far outweighed by the value of the idea exchange they provide.

It is true that meetings are useful in generating new thinking. Discussion by a group, for example, can sometimes mold a wild or impractical suggestion into a workable plan.

But meetings are also supposed to lead to sounder decisions by bringing in more opinions. This is one of those false premises we accept because it has been around so long. Too often, the opposite is true.

Funnel several men of sound judgment into a committee room, mix thoroughly, and what do you have? Even more sound judgment? Not usually. In most cases, each one tends to rely on the opinions of the others and to exert less individual care. The more confidence he has in his colleagues, the stronger this tendency. As a result, a group of competent executives may make mistakes that no one of them would commit alone.

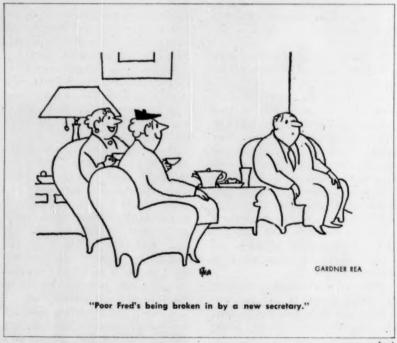
A major manufacturing company, for example, recently found its cash position seriously hurt because of a 50 per cent error in estimating the cost of a new southern plant. Instead of the estimated \$6.4 million, the total disbursement finally reached \$9.7 million.

This came about not through any single miscalculation, but as a result of many oversights. The group of managers who ran this project should have spotted every one of them, but the incentive to be cautious was missing. If any one of these men had known that he had sole responsibility for the estimate (and if he, in turn, had subdivided that responsibility among appropriate individuals), then

sheer awe of the consequences would have compelled a more precise attitude.

So the major consideration in deciding when to meet should be not merely the amount of tim involved, but the ensuring of highest performance. A single executive, properly selected for a job and specifically charged with carrying it out, will have more to gain, more to lose, and therefore more concentrated enthusiasm than any group.

■ Charles A. Cerami. NATION'S BUSINESS, November, 1957, p. 40:3.



-Look

## New Light on Industrial Accidents

A VARIETY of environmental factors have been tied to the frequency and severity rates of industrial accidents by a recent study of 147 companies made at the Illinois Institute of Technology and reported in *Personnel Psychology*. Some of the factors found to be closely correlated with accident frequency rates were:

Seasonal layoffs. Plants with heavy seasonal layoffs had higher accident rates. This might be due to the emotional insecurity engendered as well

as to the loss of experienced personnel.

Attitudes toward efficient workers. Plants with low accident rates report that highly efficient workers are respected rather than envied or regarded as company stooges.

Size of plant. Larger plants have lower accident rates.

Location of plant. Plants located in heavily industrialized areas have higher accident rates than those that are somewhat isolated from other plants. One possible reason: less positive emotional involvement in the job because of the physical ugliness of the environment.

Type of materials handling. Plants with a substantial number of workers handling heavy (over 50 pounds) materials have higher accident

rates. Fatigue and physical stress are responsible.

Living conditions of workers. Where workers are compelled to live in slum areas, plant accident rates are high. Slum conditions usually mean overcrowding, ugliness and dirt, and greater moral and physical hazards to the employee and his family. This results in mental depression and preoccupation while on the job.

Garnisheed wages. A high percentage of personnel with wages garnisheed by legal action usually goes along with a high accident rate. This is probably another case of outside stresses affecting concentration

on the job.

Factors found to be related to the accident-severity rates were:

Absenteeism. High accident-frequency plants do not have high absenteeism rates, but high accident-severity plants do.

Union representation. Plants most thoroughly organized by a national union tend to be above average in accident severity. This may be due to the higher average age of workers in organized plants, since older workers don't mend as fast as younger workers after an accident.

Tardiness penalties. Plants which are most severe in penalizing tardiness have a significantly lower accident-severity rate.

Profit-sharing. Profit-sharing plans appear to be associated with below-average severity rates.

A MAN IS NOT IDLE because he is absorbed in thought. There is a visible labor and there is an invisible labor.

-Victor Hugo

# Is Everybody Happy?

Employee Job Satisfaction in 132 Companies

Most companies are convinced that employee job satisfaction is essential to good job performance, judging from the amount of effort and attention they give to the evaluation and improvement of employee morale. A recent survey of 132 representative companies by the Bureau of National Affairs, Inc., reveals that almost all companies try to gauge the level of employee job satisfaction and utilize a wide variety of techniques intended to make each employee's job more interesting and satisfying.

The survey provides some interesting data on which appraisal methods are most widely used by the 100 per cent of larger companies (over 1,000 employees) and 90 per cent of smaller firms (1,000 or fewer employees) that make some attempt to

measure the level of job satisfaction among their employees. Discussion with supervisors proves to be the most popular approach—used by 89 per cent of larger companies and 82 per cent of smaller ones. Close study of turnover rates is almost as well-favored, with 83 per cent of larger companies and 75 per cent of smaller ones using this method. The use of exit interviews is almost as wide-spread, and so is the study of absenteeism trends.

Other appraisal methods used, in order of their popularity, are: listening to union representatives (67 per cent of larger companies and 50 per cent of smaller ones); study of grievance records (57 per cent and 50 per cent); study of disciplinary cases (43 per cent and 39 per cent); regular interviews with employees (49 per cent and 21 per cent); study of quality standards (35 per cent and 29 per cent); study of participation in suggestion plans (29 per cent and 29 per cent); and attitude surveys (40 per cent and 11 per cent).

The responding companies were asked which methods they considered most effective in measuring the level of job satisfaction. Their replies indicate that the methods regarded most highly are regular interviews with employees (although it will be noted that this is one of the less widely used techniques) and discussion with supervisors. Other methods rated as effective, in descending order of the number of mentions, were exit interviews, attitude surveys, listening to union representatives, study of turnover rates, and study of grievance records.

Respondents were also asked which methods they considered *least* effective in measuring employee satisfaction. The method which got the most mentions was the exit interview, and following in order were study of participation in suggestion plans, study of absenteeism, listening to union representatives, and study of quality standards.

It is interesting to note that two appraisal methods—exit interviews and listening to union representatives—are considered among the more effective techniques by one sizable group of respondents and among the least effective by another large group. The distrust that many companies have of the exit interview was explained by one industrial relations director this way: "There invariably are exaggerations made by an employee during an exit interview."

How do companies try to make their employees' jobs more interesting? The responses of the participating companies to this question revealed these approaches:

1. Explain to each employee how his job fits into the whole company picture. (This was the technique mentioned most frequently.)

Brief employees on the company's products and how they stack up against the competition.

 Use scientific placement methods to slot employees according to their temperaments and expressed interests.

4. Rotate routine jobs for maximum work variety.

Enlarge each job as much as possible. Let an employee work on an entire project rather than on just a small repetitive part of it. Give him as much decision-making power as is feasible.

Encourage employee suggestions on better ways to do their work.

 Offer employees plenty of opportunity for promotion. Post job vacancies and give preference to promotions from within. Encourage employees to acquire new skills.

8. Make sure that new or transferred employees are well oriented.

Train supervisors and foremen in human relations and effective methods of dealing with employees.

Sponsor contests among different departments and sections.

Put on plant tours and "open house" events for employees' families.

12. Provide employees with a steady flow of information regarding new developments, business conditions, and other subjects of interest to them. Use all channels: house organs, meetings, letters to employees' homes, and the like.

13. Relieve the monotony of repetitive jobs through the use of rest periods and music.

Fringe benefits, of course, are an important factor in employee satisfaction, but some play a larger role than others. Judging from the opinions of the respondents, the various group insurance benefits make the greatest contribution to employee sat-The benefits cited most isfaction. frequently, in order of the number of mentions, were hospitalization, life insurance, surgical benefits, sickness benefits, medical benefits, and accident insurance. Pensions, vacations, and holidays were other fringe benefits given high ranking. Benefits cited by at least 5 per cent of the responding companies included company recreation programs, profitsharing plans, bonuses, overtime premium pay, paid sick leave, and company aid to education.

The respondents were almost unanimous in rating three nonwage factors—job security, opportunity for advancement, and good supervision—as essential to employee satisfaction. Other nonwage factors cited were good working conditions (mentioned by 22 per cent); recognition of good performance (18 per cent); congenial co-workers (10 per cent); fairness in applying company policies (8

per cent); and company stature in the community (6 per cent).

How important are nonwage factors in comparison with wages? Interestingly, a substantial number of companies expressed the opinion that for certain of their employee groups nonwage factors were more important to job satisfaction than were wages. This was held true for management employees in 17 per cent of the companies, professional and technical employees in 15 per cent, older employees in 9 per cent, and office and clerical help in 7 per cent.

#### Insuring Our Foreign Investments

ONE OF THE MOST IMAGINATIVE of our government ventures is an insurance operation in foreign investment. No longer a minor experiment, the Investment Guarantees Program has been running for nearly a decade and has already insured \$180 million of U.S. overseas investments in 18 countries. Another 19 countries have agreements under the program, but so far, there have been no actual investments.

Under the program, the U.S. protects the foreign investor against certain kinds of losses in return for a set premium. Although the program is based on the insurance principle of pooling the risks among many premium-holders, it cannot be tied to strict actuarial principles because the risks refuse to obey sane calculations. No one can guess what a South American military junta will do—and it can do distressing things to sound investments.

A flat premium of 0.5 per cent is charged for each of three types of guarantees. The convertibility insurance promises the U.S. investor that he will be able to convert the foreign currency earnings of his investments into dollars and that he will also be able to repatriate his capital. The expropriation insurance compensates the investor in case his property is nationalized without adequate compensation.

The third type of guarantee provides insurance against losses arising from the destruction of foreign facilities in war—excluding, however, riots or civil war.

Guarantees are carefully limited, and only new investments can be insured. The convertibility guarantee does not protect the insurer in the event of devaluation; he is only promised convertibility at the new, disadvantageous exchange rate.

-Emile Benoit in Challenge 1/58



## Where Are the

## White-Collar Workers?

An electrical equipment company in New Jersey would like to increase its clerical force by about 40 per cent, but it can't even get enough qualified applicants to keep up with the turnover. A company in the same industry, located in Rochester, N. Y., has applicants waiting for any office jobs that develop.

To get a realistic picture of the supply and demand situation in the white-collar field, *Dun's Review* queried more than 200 representative employers around the country on their recruitment problems. Replies indicated that the situation varies not only by state and by city, but among companies in the same city.

Is there an over-all shortage? About 45 per cent of all the companies think there is, and that it has grown unusually tight in the last three years. Most of the rest say the situation is normal enough, or—as one personnel manager phrased it—that "there's no real shortage. We just don't get as many applicants as we used to." A very few seem to be encountering no problems at all.

Most of the personnel managers who are having trouble lay their difficulty to sociological causes: the low birth rate of the 1930's, early marriages, and more babies.

The trend toward college-going, a sizable group reported, also reduces the supply. "At the end of the college year," one personnel manager said, "we're simply swamped with applicants, but we don't have jobs for them because many of them can't type and most don't know any stenography. Furthermore, they're apt to want 'creative' work—writing advertising copy or something of that sort."

Some blame the schools for the lack of qualified candidates, and a few appear to believe that the young people of today are just naturally more irresponsible and less intelligent than those of a few years back. "Can't spell, can't lay out a letter," says the personnel manager of a company where only 2 per cent of the applicants meet minimum standards. "Poor vocabulary and insufficient knowledge of arithmetic," says an-

other. Some complained that the majority of applicants had low I.Q.'s or a "passive attitude." One man summed it up this way: "People do not do a day's work—come in late out for coffee—out for cigarettes quit early and loaf on the job."

Whatever the cause, nearly all companies—whether or not they consider that there is a shortage—get very few qualified applicants for a job opening. Many consider themselves lucky to get even one who meets minimum standards.

What are companies doing to attract more qualified applicants?

By far the most prevalent practice has been raising beginning salaries, and the raises quite naturally tend to be higher in areas where the supply is short. A California company, for example, has raised salaries for beginning secretaries \$15 a week, now pays \$87; stenographers are up \$14 to \$79 a week; typists are up \$8 to \$72. In other areas, the raises are much smaller, and so are the actual salaries. It's a rare company that will pay more than \$55 a week to a beginning typist.

Emphasis on recruitment of new high school graduates appears to be growing, and personnel departments are attempting to keep in close touch with educators. One large New York insurance company, in fact, has a high school "campus recruiter" who spends the greater part of her time visiting the schools. Seminars for business school teachers, "business education" days, luncheons for high school seniors, and advertisements in school papers are among the means used to attract the graduate. Most productive, however, appear to be

offers of part-time employment during the year.

Another source of applicants that seems to be receiving new emphasis is the employee referral. Few companies offer monetary rewards for this, though most encourage it through bulletin board notices, stories in their magazines, or talks with employees. Where a monetary reward (range: \$10 to \$75) is offered, it is generally withheld wholly or partially until the new employee has been on the job several months.

Whether or not a reward is given, the employee referral seems to be a productive source of supply. For more than 10 per cent of the companies covered in the survey, it is the main source, and a substantial number of others find that it produces many of their applicants.

Companies have, however, about reached the bottom of the barrel so far as new sources of supply are concerned. Only in the case of the receptionist job has an entirely new source come into prominence. In the New York area the practice of using retired policemen and firemenexecutive-looking types equipped with old-world courtesy-appears to be growing. This, incidentally, is disappointing to many of the girl graduates. Personnel managers find that most of them start out with the idea of being receptionists rather than file clerks, typists, or stenographers.

Few companies admit that they have lowered standards for clerical jobs, at least within the last few years, and some say they have tightened up the requirements through the introduction of testing, or because they hope to be able to do more pro-

moting from within the company.

A high school diploma is still, apparently, a prerequisite to most office jobs. So is a neat appearance and a "good personality."

The most conspicuous lowering of standards has been in the skills required. In some offices a girl who can type 30 words a minute is acceptable, and 80 words a minute is considered a passable stenographic speed, sometimes less than that if the girl can transcribe accurately.

As for age limits, the majority of companies have not changed them in the last few years, but there does appear to be a small movement toward hiring of older women. What

constitutes "older," however, varies widely among companies. One concern, for example, reports that it has "raised the age limit to 30." Others mention 35, 45, 55, or even 60. A few have dropped upper age barriers altogether.

In addition, there is a group of companies that have simply become "more flexible" about all standards. One Chicago personnel man says bleakly: "We have to take what we can get and then with patience try to develop them. About one out of four works out."

Alice Smith. Dun's REVIEW AND MODERN INDUSTRY, October, 1957, p. 120:4.

## Why Executives Give Their Time Away

EVEN THOUGH his time is usually at a premium, it's a rare top executive who doesn't donate a portion of it for charity, civic and other public service activities, judging from a recent survey made by *Management Methods* magazine.

Nine out of ten respondents said they are active in community programs, and a majority spend up to ten hours a month on such projects. About half of this is business time, the rest personal time.

Charity drives, such as the Community Chest, Cancer Crusade, and Red Cross are the most popular activities in terms of the amount of executive time devoted to them. These are followed closely by youth organizations like the Boy Scouts and Y's, then by school activities, hospital and welfare work, church activities, and the like.

Why do executives take such an active part in community affairs? The reason most frequently mentioned (by 93 per cent of the respondents) was the belief that it was an obligation of good citizenship. A sizable proportion (37 per cent) said that their company's position in the community obligates them to participate. Only 14 per cent mentioned that the contacts gained during these activities prove helpful in business.

-Management Methods 11/57

## Eight pitfalls in

## MARKET-TESTING NEW PRODUCTS

PROPERLY CONDUCTED, a market test can take a lot of the guesswork out of the introduction of a new product or change in an old product. But all too often, the unwary company fails to sidestep one or more market test pitfalls and ends up with completely misleading results.

Here are eight of the most common errors committed in test-marketing new products:

1. Failure to select an average market. Often a test market is selected because it is near the home office—perhaps on the theory that results can be readily observed. But the company may enjoy an abnormally strong franchise in such a market, because of the historic growth pattern of the company, a freight advantage, or some other reason.

In other instances, products have been purposely introduced in an area of known high per capita consumption on the theory that it provided an important market in which to check the impact of the new product. However, since such markets are not representative, results obtained in them cannot be projected with accuracy. Efforts to achieve the same level of success in other markets are invariably disappointing.

2. Failure to develop a successful promotional plan. Here is what can happen when insufficient funds are appropriated to promote the new product. Recently, a radically new product was placed on the market in a rush, before a carefully thoughtout promotional plan had been devised and implemented. Because initial demand was brisk it was decided that little promotional support was necessary.

However, a second company quickly developed a comparable item and spent five times as much on its promotion. The original company lost its initial advantage to an aggressive competitor that more accurately judged the potential market and made its launching efforts on a larger scale.

3. Over-spending on promotion in the test market. Going too far in avoiding error No. 2 can be dangerously misleading. All too often a new product is spoon-fed in the introductory markets by extra promotional efforts which could not possibly be duplicated on a broader scale. While most manufacturers are alert to this danger in terms of media advertising, they often fail to restrict the efforts of their sales representatives adequately. As a result, the

new product may be over-promoted through too-frequent sales calls, the maintenance of excessively high trade stocks, or high-level pitches by major corporate executives.

4. Failure to measure the total market. This should include all products of a competitive or semi-competitive nature. Unless this total competitive market is measured, there is no way of knowing whether a gain in sales of the new product is being equalled by gains for competing products. Thus there is danger of assuming that the new product is doing better than its competitors, when it may actually be just keeping up or even slipping back.

5. Failure to measure all salesinfluencing factors. For example, a
manufacturer was recently misled by
test market results because he didn't
realize that at the time he launched
his new product competitors were
temporarily short of product and
could not fully satisfy demand.

6. Failure to allow enough time for a conclusive test. It requires more time properly to judge the success or failure of a new product or a product change than many executives seem to believe. Some products apparently do not wear well, and buyer interest, perhaps over-stimulated during the introductory promotional campaign, cannot be sustained at a reasonable cost. Measurement of sales in the test market should continue as long as the issue remains in doubt. Six to eight months would appear to be the barest

minimum for most products. In addition, it is useful to have continuing reports on the test markets even after the product is put into mass distribution, so that any inherent weaknesses which may exist or develop will become apparent at the earliest moment.

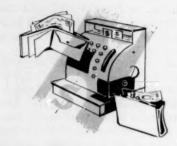
7. Failure to expose product to competitive counterattacks. When a new product is introduced, competitors naturally watch its progress with intense interest. However, they usually discount the early, exaggerated reports on the new product's impact which they get from their own sales representatives. So it may be a while before competitors become sufficiently worried to mount any aggressive counterattacks. However, such counterattacks will come eventually, and a market test should determine just how effective they are, since they may have a profound effect upon the ultimate success of the new product.

8. Failure to use proper storeauditing procedures. There are many pitfalls here, mostly of a technical nature. When purchasing services of this type from outside organizations, a company should consider the sample which can be achieved, the type of men doing the store-auditing work, whether the results obtained can be validly projected to other markets, and, finally, the experience of the organization in interpreting findings.

> A. C. Nielsen, Jr. Commerce, December, 1957, p. 36:5.

WE NEED TO CULTIVATE fertility of thought as we have cultivated efficiency in administration.

-Norbert Wiener



## Who Profits

## from Trading Stamps?

T RADING STAMPS have reached the crest of the greatest boom in their 65-year history. Retailers offering stamps recorded about 12 per cent of total retail sales in 1957. This represents a leveling off at the peak that stamps reached in late 1956 after five years of dramatic gains.

With the maturing of the present stamp boom, it is possible to answer more confidently the questions businessmen have been raising about this form of retail promotion:

- € Why have trading stamps grown in use so rapidly?
- What is their effect on a retailer's volume and profits?
- ⊕ How do they affect a store's customers?
- € What about the future of stamps?

Although trading stamps are important in all types of convenience-goods retailing, supermarkets have carried the boom. More than 40 per cent of them give stamps, which amount to over half the total given by all retailers. Furthermore, stampgiving supermarkets have stimulated

many nonfood retailers to adopt the same promotion. To explain stamp prosperity, therefore, we need to find out why so many supermarkets have adopted them.

Leading factors in the start of the stamp wave were the decline in the distinctiveness of price appeal and the inability of supermarket managements to exploit price advantages any further in order to win new customers from service stores. The long period of sustained prosperity is also an important factor in explaining the rise of stamps. Contrary to a popularly held idea, stamps have never been a depression phenomenon.

A further major factor is the widening of food store trading areas. In our automobile age, shrinkage of the protection once afforded by location has intensified food store competition, and made it possible for individual stores to expand sales substantially by taking just a little patronage away from a lot of rivals.

How have stamps affected the volume and profits of the retail stores using them? Super Market Merchandising made a study of 17 supermarkets that had adopted stamps prior to 1953. Their average weekly increase in sales volume after six months was 25 per cent. Three firms, however, had a sales rise of more than 60 per cent, while at the other extreme two reported no gain at all.

From this and other surveys it is evident that stamps have tended to raise the sales volume of their users. Surveys on the effect of stamps on profits have produced similar results. Moreover, most evidence suggests that well-established stamp plans are not easily neutralized when rival stores introduce competing stamps.

Taking into consideration all available data, it seems reasonable to estimate that non-stamp food stores have lost—in the aggregate—about 4 per cent of their market share to stamp-using stores.

While consumers and communities vary in their attitude toward stamps, it is clear that stamps have wide acceptance and that this appeal does not wane significantly with time. The attraction is especially strong among younger housewives. In communities where stamp-giving is prevalent, 80 to 95 per cent of the families save them.

Have consumers gained as much from stamps as they think? What, for example, has been the effect of stamps on prices? And how have they affected the operating costs of stores?

Judging from the economic facts, the consumer gains from premiums have not been offset by price increases—at least, not food prices. Indeed, it does not appear that food prices in the aggregate have increased at all as the result of stamps.

Surveys by food trade papers reveal that a few stamp users have raised prices after adopting this form of promotion and that a few have lowered prices. But the net result of these surveys is consistent with the conclusion that stamps have not caused general price increases.

How can stamp costs be accounted for if they have not worked their way into higher food prices?

If a stamp-using store raises its prices 2 per cent, a loss of 10 to 12 per cent of patrons is ordinarily enough to leave the store worse off even though its prices are higher. To support the conclusion that a merchant can recover his stamp costs through price increases, it must be assumed either that his competitors also increase prices or that he can bury the increase so that it will go unnoticed.

The first assumption does not hold up because few areas lack aggressive nonstamp groceries. With so many consumers indifferent or hostile to stamps, price increases would be a good way of scaring trade away.

The argument that stamp-giving merchants can hide a 2 per cent price increase so that customer traffic will be unaffected is not convincing unless competitors go along with the rise, even for food stores where assortments are typically 4,000 to 5,000 items. There is too much comparison shopping to make this feasible—nine out of ten families regularly buy their groceries in more than one store, and nearly one in five shops around in as many as six or more stores.

If stamps have not raised food prices, how can we account for the burden of this promotional outlay? For individual stores with effective stamps, increased sales volume has reduced operating expense ratios at least enough to offset stamp costs, and thus has shifted the cost burden to competitors. For the retail grocery industry, as a whole, it appears that at least half of the stamp cost during 1955 and 1956 was offset by declining profits-reduced earnings for stores with ineffective stamps and declines for some of the stores which have lost volume to stamp outlets.

There is no indication that stamps

are about to fade to the position of relative insignificance which they have occupied throughout most of their history. Many stores have found them a potent way to achieve a differential advantage in one segment of the market. Unless there is a sharp depression or discovery of another revolutionary method for reducing food distribution costs, the major factors that led to stamp ascendancy will continue to influence the market.

■ Eugene R. Beem. HARVARD BUSINESS REVIEW, November-December, 1957, p. 123:14.

## Promoting Promotion from Within

THE COMPANY that fails to let its employees know about its promotions from within is neglecting an important factor in employee morale. Too often employees hear only about isolated cases of hiring on the outside and are not aware of the overwhelming number of promotions that are made from the inside.

One company (Ford Motor Co.) has made sure its employees know the facts by putting out a pamphlet titled *Promotion-from-Within* . . . Fact or Fiction? Here are some of the figures used to convince employees that the company's promotion policy is actively carried out:

During the 18-month period from January, 1956, to June, 1957, there were 13,839 promotions within the salaried work force. In addition, 3,281 hourly employees were promoted to salaried jobs during the same period. This meant that promotional moves affected almost 25 per cent of Ford's 56,000 salaried employees in 18 months.

In addition to presenting these figures, the pamphlet also explains in detail how the company keeps tabs on salaried employees so they will be assured of consideration for promotion when appropriate openings occur.

-Lester R. Bittel in Factory Management and Maintenance 12/57

FEW THINGS ARE IMPOSSIBLE in themselves. It is not so much means, as perseverance, that is wanting to bring them to a successful conclusion.

-Rochefoucauld

This question becomes increasingly urgent as the proportion of the labor force in the service field continues to grow . . .

## Can Service Industries Boost Productivity?

MORE WORKERS are employed in service industries than in any other field, and their proportion-now about 50 per cent-is still rising. This significant trend in our national economy raises some important questions. Has the output of services been increasing more rapidly than the output in manufactured products, or does the rising proportion of employment in the service industries reflect their lag in productivity? The answer seems to be that both of these factors have been operating to increase service industry employment.

Although the total output of services has grown faster than the total output of commodities since 1900, some service industries have lagged behind others. Thus, output in transportation, communications, and public utilities rose faster than in any other group, while trade, finance, and professional services showed a significantly smaller increase in output than the commodity-producing sector as a whole.

This lag in the output of trade, finance, and professional services, combined with the upsurge of employment in these fields, indicates a relatively slower productivity advance. Indeed, while productivity for all industry has increased at an average annual rate of 2.5 per cent since 1900, it has increased for service in-

dustries at a rate of only 1.5 per cent per year.

How has productivity in the service industries been doing in recent years? It's advancing more rapidly, but still not at the rate it's increasing in other industries. Between 1948 and 1955, output per man-hour in the trade, finance, and services industries rose at an average rate of 2 per cent a year, but this is still only a little more than half the 3.5 per cent rate of productivity increase which has been maintained by industry as a whole. Despite improvements in productivity, the service industries are continuing to absorb an increasing proportion of labor.

How have the service industries been able to expand their productivity at all? Mainly through technological advances which have led to an increase in the amount of capital expended per service worker. Improvements in business machines generally, and the introduction of electronic data processing in particular, have contributed to reduced costs in the service area, particularly in finance. For example, ERMA (electronic recording machine, accounting), developed by the Stanford Research Institute for the Bank of America, credits and debits individual accounts. remembers details of all transactions, maintains correct balances, accepts stop payments and hold orders, prevents overdrafts, and sorts checks that are coded with magnetic ink. Several larger banks have installed electronic systems, and, despite present high costs of computers, smaller installations or cooperative central systems hold promise for smaller banks.

Life insurance companies have thus far been bigger buyers of electronic data-processing equipment than banks, since their computational and record-keeping operations are even more enormous. Large stores, professional services, and universities—not to mention the government—are other beneficiaries of this form of automation.

Highly automated warehouses have been helping to cut costs of wholesalers and retail chains. Electronic controls, monorails, and conveyors speed the flow of merchandise, and paperwork is closely tied in with the physical handling. Punch cards that guide the goods are also used to type store bills and bills of lading. The firm that designed and engineered an "automatic warehouse" for Mangel Stores Corp. estimates direct labor savings of 50 per cent or more. The ideal is a "distribution center" with a continuous and balanced flow of goods which reduces storage and saves rent and interest on capital tied up in inventories. Data-processing equipment also reduces the time lag between sales and price-line analysis. an important factor for merchandising control.

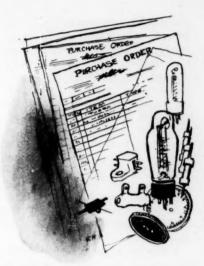
Even in professional services which demand flexible and creative thinking there are opportunities for increasing productivity. Use of electronic computers by consulting firms speeds problem solving and extends the range of the human mind. And research into the process of inventive thought itself holds promise of greater returns in the future from research and development activity.

Many of the technological developments that are helping to raise productivity in the service industries are only in their infancy. For example, of the 17,000 banks, insurance companies, and other financial institutions, only a few dozen have installed office automation. The fact that less than 1 per cent of all research and development outlays are being spent by the service industries (other than the utilities) suggests the tremendous potential for further technological advance in this area.

If management of firms in the trade, finance, and professional services area seeks even more aggressively to adopt new equipment and organizational improvements, there is good reason to expect further acceleration in productivity. Since the service industries now employ more than half our labor force, this would mean a significantly faster rate of productivity advance in the economy as a whole, assuming that the commodity-producing industries maintain their past rates of advance. It would also mean that the trend toward a higher and higher proportion of the labor force in the service industries would taper off and perhaps come to an end. And finally, price rises in the service industries, which have been outstripping the rises in commodity prices, would slow down.

> ■ John W. Kendrick. CHALLENGE, January, 1958, p. 29:5.

# Helping Vendors Maintain



## Quality Standards

DESPITE THE NEED for highquality component parts to go into today's complex products, too many manufacturers simply give a vendor an order specifying what is required and then leave all problems to him.

This shortsighted approach makes it difficult to arrive at a quick, effective solution to the problems that may come up. If the parts are not to specification, the vendor is admonished, but no attempt is made by the purchaser to uncover the source of the difficulties. If trouble persists, arguments often develop, usually based on misunderstanding. Too often the dispute is never resolved, the vendor is dropped, and the cycle starts all over again with another vendor. It is clear that this method of operating is not profitable to either vendor or purchaser, and that a much closer and more realistic relationship needs to be developed.

The first step before selecting a vendor is to make a formal survey. It should contain information on all factors affecting the vendor's ability to meet the contract requirements, such as processing equipment, gauging equipment, and the use of quality control procedures.

When a vendor is invited to bid on a job, the company should make certain that there is agreement on interpretation of the specifications. The vendor must understand that all tolerances are to be held absolutely. Any failure to hold them, regardless of how small the deviation may be, is reason for rejection.

Once there is a mutual understanding of specifications, the vendor and the purchaser should come to an

understanding on standards of measurement. The vendor should be required to describe completely the exact method by which he intends to check each specification. This procedure should then be checked by the quality control engineer in the purchasing company's inspection department to determine whether or not it is practical. If the vendor is being asked to use inspection equipment which he could not logically be expected to own, the buyer should either lend him the equipment or make it possible for him to buy it by allowing a reasonable increase in his price.

When the vendor is set up to make the first run on a job, he should be required to stop production after making a preproduction run of 20 pieces. These parts should be numbered in sequence of production and checked by the vendor on the vendor's equipment. All characteristics that are difficult to hold within specification limits should be checked three times (to show the degree of repeatability) and the readings listed on a tag secured to the part. The parts should then be reinspected on the purchaser's equipment to check for consistency in measuring. Then for each characteristic, the following statistical check should be made, using the readings taken on the buyer's inspection equipment:

- 1. Compute the average of each of the 20 sets of readings.
- Set up an "aiming band" half the tolerance in width and centered within the tolerance.
- Note the number of average readings which fall within the aiming band.

Of the 20 pieces checked, at least 15 should fall within the aiming band; if not, both centering and spread should be analyzed to determine what should be done to improve the process.

Lectures on quality control procedures, given for vendors in the purchasing company's plant, can be an effective method of helping the vendor do a better job. The vendor should not only be taught how to keep parts within specification limits during processing, but should also learn something about statistical sampling plans, both by variables and attributes. This will enable him to verify his own work and correct outgoing shipments that fall outside the limits.

The in-plant lectures should be followed up promptly by instruction in vendors' plants and aid with the actual application of the techniques. Classroom instruction is worthless unless it is supplemented with actual practice.

Vendors should also be supplied with a general manual describing the buyer's quality control procedures as they pertain to him. Such a manual should include:

- General company policy regarding vendors.
- Specific policy regarding acceptance and rejection of material from vendors.
  - 3. Inspection plans.
- Process control required of vendors.

Incoming inspection data—on both good and bad lots—should be sent to vendors regularly so that they always know where they stand. Any lots giving serious trouble should be dealt

with immediately. From such a lot five parts should be selected that contain all the deviations listed on the material rejection report. Each deviation should be rechecked three times, using three different inspectors if possible.

The next step is to take the rejects to the vendor involved, where they can be checked by the vendor's inspectors. The statistical analysis described earlier should then be made to establish what corrective action should be taken.

When the analysis indicates that the process spread is too wide, a fresh look at the specifications is called for, to make sure they are really necessary for reliability. In some cases, widening a tolerance will make manufacturing easier without sacrificing reliability.

> ■ William E. Porter. Purchasing, November, 1957, p. 87:4.

## Radio Paging Proves Its Worth

PLANT RADIO PAGING has a number of advantages over orthodox methods of getting important messages to roving personnel, judging from the experience of Gillette Safety Razor Co. (Boston, Mass.) Messages come over tiny receivers which can be carried in a pocket or on a belt. When a signal is broadcast, it is heard only by the person for whom the message is intended. He presses a button on his set and then receives the message. If it calls for a reply, he must phone in, since the radio system is a one-way affair.

Installed a little over a year ago, the new system has produced these benefits:

- Saturation coverage. The radio voice reaches anywhere in the plant or on the grounds.
- Instantaneous paging. Person called gets the message at once and responds immediately, because radio-paging achieves a "command" effect.
- Quiet calls. There are no blasts from PA squawkboxes, no shrieks from signal horns.
- Privacy. Each pocket receiver responds only to its own signal, and messages cannot usually be overheard.
- Flexibility. Hand an employee or visitor a receiver and he's in the paging system.
- Reduced downtime. Maintenance men get on the job faster.
- Clear phone switchboards. No more lines tied up waiting for a connection.

-Factory Management and Maintenance 10/57

## **BRIEF SUMMARIES**

## of other timely articles

#### GENERAL

THE NEXT TWENTY YEARS. Fortune (9 Rockefeller Plaza, New York 20, N.Y.), January, 1958. \$1.25. What is the most important economic problem that the U.S. will face in the next two decades? Of the 50 leading thinkersincluding economists, businessmen, and educators-who answered this question for the Committee for Economic Development, a third described the top economic problem as the challenge posed by the underdeveloped nations of the free world, a sizable number picked inflation, and mentions were also given to congestion and the preservation of our standards and principles. This report includes substantial excerpts from six of the answers.

OUR ECONOMIC RACE WITH THE SOVIET UNION. By Harry Schwartz. Dun's Review and Modern Industry (99 Church Street, New York 8, N.Y.), December, 1957. 75 cents. Just as the loudest scoffers at Soviet capabilities were wrong, so too are those today who panic at the "beep-beep" of sputniks in outer space, says the author, pointing out that despite Soviet accomplishments Russia is facing severe economic problems that will slow down her rate of industrial advance. He describes some of the most serious problems, such as unrest caused by the low standard of living, inefficiencies in the Soviet central planning system, and demands for capital investment that far exceed the available resources.

MANAGEMENT DEVELOPMENT. Factory Management and Maintenance (330 West 42 Street, New York 36, N.Y.), December, 1957. Reprints \$1.00. The chief reason management development programs in many companies prove disappointing, especially at the plant operating level, is that attention is focused on gimmicks rather than principles, according to the authors. This special 32-page section features reports on significant practices and philosophies in management development, including tips on making management development work, selecting supervisors and managers, handling appraisal interviews, and creating the climate to help managers grow.

HOW EXTERNAL PUBLICATIONS WORK. By Robert B. Konikow. Advertising Requirements (200 East Illinois Street, Chicago 11, Ill.), January, 1958. 50 cents. Suggesting that the external house organ is deserving of more recognition as an effective tool in the building of sales and goodwill, the author reports on the practices used in putting out 100 representative external publications. Among the findings of his survey: most companies view external publications as a public relations tool but take the money out of the advertising budget: almost half of the publications are supervised by the advertising manager; publications primarily feature general articles, industry news, and company news: and circulations range from under 5,000 to over 100,000.

NEW PUSH: UNDERGROUND SITES. Industrial Development (Conway Building, North Atlanta 19, Ga.), November, 1957. \$3.00 per year. Russian progress in the field of ballistic missiles is causing many industrial planners to take another look at the feasibility of

underground locations for industrial facilities, the author says, suggesting that for many activities the cost of underground plants may compare favorably with that of surface units. In this article, he presents some criteria for

the selection of sites for light and medium-heavy manufacturing facilities, process industries, and storage use, reviews the basic requirements that must be satisfied, and describes some existing and potential sites.

#### INDUSTRIAL RELATIONS

LIFE IN THE AUTOMATIC FACTORY. By Charles R. Walker. Harvard Business Review (Soldiers Field, Boston 63, Mass.), January-February, 1958. Reprints \$1.00. How are workers' lives changed by the automatic factory and what can management do to provide for the new job needs that result from these changes? After closely observing the transition of a seamless pipe mill to automatic operation during a sixyear period, the author has come up with some significant findings on the human aspects of automation that can be a useful guide to management in such areas as training needs, workers' desire for participation in production problems, pay scales, social groupings, job definitions, and employee attitudes. (For a review of the author's recently published book on this subject, see p. 93.)

1958: NEW LABOR PROBLEMS. Nation's Business (1615 H Street, N.W., Washington 6, D.C.), January, 1958. \$18.00 for three years. During this year of heavy contract bargaining, U.S. business can look forward to an increase in strikes, intensified union organizing efforts, and more raids by unions on each other, according to this round-up of recent developments and future trends in the labor-management field. Pinpointing some of the union tactics with which management will probably be faced-such as the secondary boycott and mass picketing-the article discusses the impact of recent NLRB decisions on management's rights in these areas, including the decision that picketing for exclusive recognition by a union that does not represent a majority of the employees is a violation of Taft-Hartley.

#### **OFFICE**

HOW TO SAVE MONEY AND SPACE BY ESTABLISHING A RECORDS CENTER. By F. L. Sward. Office Management (212 Fifth Avenue, New York 10, N. Y.), December, 1957. 45 cents. Haphazard storage of inactive records means hours of valuable time wasted in searching for a specific document when it is needed, says the author, since no one knows exactly what is in storage or where to look. In this article, he describes the steps that should be taken to establish a smoothly functioning records storage center, including (1) choosing the location; (2) selecting the right type of storage equipment; (3) keeping complete records of the material

stored; and (4) providing prompt, accurate reference service.

THE ANATOMY OF ELECTRONICS. By Charles G. Abbott. Office Executive (1927 Old York Road, Willow Grove, Penna.), January, 1958. 50 cents. A general introduction to the terms, procedures, and machines of electronic data processing. Pointing out that the computer exceeds the human brain in three factors—speed or response time, accuracy, and economy—the author describes some of the basic elements involved in EDP, including punched cards, paper and magnetic tape, memory units, and output devices.

WHAT MANAGEMENT NEEDS TO KNOW ABOUT WAGE AND HOUR REGULATIONS. By Robley D. Stevens. Office Management (212 Fifth Avenue, New York 10, N.Y.), December, 1957. 45 cents. When the wage-hour inspector comes around, management must be ready to provide complete, accurate records on every office employee, says the author, pointing out that the lack

of such data could result in additional overtime pay charges. He provides a check-list of the information that must be recorded for various types of office employees, including those subject to the minimum-wage rate and overtime pay, those exempt from overtime pay, homeworkers, employees covered by union contracts, and apprentices and messengers.

#### PRODUCTION

TIP-OFF ON A NEW COST TARGET. By Carroll W. Boyce, Factory Management and Maintenance (330 West 42 Street, New York 36, N.Y.), December, 1957. \$1.00. Experiments now under way at General Electric Appliance Park (Louisville) could well bring about a revolution in distribution, says the author, and equally important, could mean a revolution in production methods as well. In this article, he presents his views on the implications of current GE experiments in direct factory-to-dealer shipments, which would eliminate all warehousing. materials handling, and inventory carrying charges; elimination of packaging by using racks to handle and ship "unpackaged" appliances; and production planning and scheduling techniques that would make rapid changes in product mix feasible and economical.

CONTROLLING DISTRIBUTION COSTS. Flow (812 Huron Road, Cleveland 15, Ohio), November, 1957. 50 cents. Cutting material handling costs through more mechanization is the unifying theme of this special 36-page feature. A series of case studies describes the cost-saving techniques used by companies in various areas of material handling, including multiple order picking to reduce shipping time; palletizing for greater storage volume; centralizing distribution; containerizing marine cargo; shipping by air freight to cut costs; and using unit loads for faster handling.

HOW YOU CAN USE LINEAR PRO-GRAMMING. By N. V. Reinfeld and B. L. Hansen. Mill & Factory (205 East 42 Street, New York 17, N.Y.), December, 1957. 60 cents. In the opinion of the authors, linear programming is a versatile mathematical tool that can provide accurate, quick answers to knotty problems of scheduling. inventory control, tooling, material handling, peak demand, distribution, etc. After describing the type of problem that can be solved by the technique, the authors give detailed examples of how it is used in such production areas as machine scheduling and scheduling tooling set-ups.

FORUM ON TECHNICAL PROGRESS. Steel (Penton Building, Cleveland 13, O.), January 6, 1958. Metalworking Yearbook Issue: \$2.00. Current and prospective technological developments are the basis of tomorrow's cost-cutting ideas and profit-boosting operations in any manufacturing company, and this special section contains forecasts and specific contributions from 301 experts on what lies ahead in the metalworking industries. Among the subjects covered are steelmaking, casting, forming, heat treating, inspection and testing, drives and controls, machining, tooling and gauging, joining and assembly, handling and packaging, lubrication, and service and maintenance.

METALWORKING: 1962. American Machinist (330 West 42 Street, New York 36, N.Y.), November 18, 1957. Reprints 50 cents. In order to revise and bring up to date American Machinist's 1952 ten-year forecast for the metalworking industries, this 32-page special report contains the views of approximately 50 experts in various

aspects of metalworking on how the original forecast stands up in the light of current conditions. In addition to the predictions of these men for the coming five-year period, the editors have included a forecast of the volume of business for 1962 and a discussion of prospects for the various metalworking industries.

#### MARKETING

THE REAL SIGNIFICANCE OF THE FREY REPORT. Printers' Ink (205 East 42 Street, New York 17, N.Y.), November 8, 1957, 25 cents. An evaluation of the contribution that the controversial Frey Report, previewed at a recent meeting of the Association of National Advertisers, will make to the advertising industry. The advertising men quoted in this article feel that the sections of the report dealing with agency-client relationships are of far greater importance to advertisers and agencies than the more widely publicized portions, which concern the dissatisfaction of advertisers with the standard 15 per cent commission method of agency compensation.

PICKING BETTER MEN FOR YOUR SALES TEAM. By Milton M. Mandell. Dun's Review and Modern Industry (99 Church Street, New York 8, N.Y.), December, 1957. 75 cents. Baffled sales managers who ask, "Why can't we get good salesmen any more?" can often be answered simply by saying, "Because you don't know how to spot them.' maintains the author. In this article, he cites some of the reasons why bad salesmen are hired-such as dependence on arbitrary requirements and the refusal to use systematic selection methods-and describes the important criteria and sound selection techniques that should be used to hire the better salesmen so vitally needed for the months ahead.

GEARING ADVERTISING TO PROFITS. By Douglas P. Gould. Tide (386 Fourth Avenue, New York 16, N.Y.), December 13, 1957. Reprints 25 cents. Advertising directed only toward increasing sales volume is not doing its job, maintains the author, because in many cases a volume increase may not be providing much in the way of additional profits. In this article he suggests ways in which advertising dollars can be put to work more efficientlysuch as emphasizing high marginalincome products and cultivating profitable segments of the market—and points out the marketing information the advertising manager must have in order to make the most profitable use of his budget.

ADVERTISING NEEDS CAN BE FORE-CAST. Printers' Ink (205 East 42 Street, New York 17, N.Y.), October 25, 1957. 25 cents. The methods used by three leading corporations to make long-range forecasts of advertising expenditures are described in this article. Some of the steps discussed are (1) estimating annual business and industrial conditions; (2) predicting the trend of competitive companies' business; (3) determining the future of new products; and (4) determining what percentage of anticipated sales should be allocated to the advertising budget.

#### **FINANCE**

GETTING ACROSS TO YOUR FINAN-CIAL PUBLIC. By Herman S. Hettinger. Dun's Review and Modern Industry (99 Church Street, New York 8, N.Y.), January, 1958. 75 cents. The remarkable increase of grass-roots investors has presented management with the challenge of creating a positive "cor-porate image" and getting it across to the investing public, says the author, maintaining that the currently popular technique of holding bigger and better annual meetings is limited in scope. After pointing out the advantages of working through the influential security analyst, he describes the kind and quality of information analysts should have in order to get a realistic picture of the company's situation.

HOW TO POPULARIZE YOUR ANNUAL REPORT. By Solomon Balsam. Management Methods (22 West Putnam Avenue, Greenwich, Conn.), January, 1958. 75 cents. If your annual report is to stand up against the 25,000 re-

ports being issued by corporations and financial institutions, says the author, it must command attention and be understandable, even to laymen. Drawing on the experiences of a variety of companies, this article describes what to say in the annual report and how to say it for optimum reader impact.

PROBLEMS IN COMPUTATION AND USE OF RETURN ON INVESTMENT. By Harold Bierman, Jr. N.A.A. Bulletin (505 Park Avenue, New York 22, N.Y.), December, 1957. 75 cents. Three commonly used ratios-return on investment, investment turnover, and operating ratio-are useful tools for summarizing essential financial information for management, says the author, but their basic limitations are sometimes forgotten. In this article, he outlines the difficulties and qualifications that must be considered in utilizing these ratios and suggests alternative measures of performance that might be substituted for return on investment.

#### FOREIGN OPERATIONS

INTERNATIONAL BUSINESS GAGES ITS 1958 PROSPECTS. By Alexander O. Stanley. Dun's Review and Modern Industry (99 Church Street, New York 8, N.Y.), January, 1958. 75 cents. Although the recent decline in U.S. business activity has jolted all segments of the international business community, most countries are surprisingly optimistic about 1958 foreign trade prospects, according to the reports filed by 53 of the overseas branches and correspondents of Dun & Bradstreet's International Divi-After summarizing the over-all trends of the forecasts on such key factors as imports from the U.S., exports to the U.S., the current dollar situation, local sales, inventories, and credits and collections, the article presents a number of reports from specific countries.

THE MIGRATION OF U.S. CAPITAL. By Charles E. Silberman and Lawrence A. Mayer. Fortune (9 Rockefeller Plaza, New York 20, N.Y.), January, 1958. \$1.25. The fourth in a series on world markets, this article focuses on the rise of U.S. private investment abroad, predicting that by 1967 foreign investments will climb from the current \$37.5 billion to almost \$90 billion. Most of this capital is invested in Western Europe and Canada, but more and more funds are being invested in Latin American nations and other less developed economies, and the author points out that many companies conducting overseas operations, including manufacturing operations, earned as much as 30 to 70 per cent of their net profits in 1956 from foreign investments.

## Making Long-Range Planning Work

(Continued from page 8)

When a company has a plan for the future, it is bound to have an effect on the people in the company. The reasoning might go something like this: "If sales are going to double in the next five years, we'll probably need more District Managers. I'd better work to get one of those jobs." When a man can see something for himself in his company's long-range plan, it is not hard to get his cooperation.

Beginning with the preplanning stage, as many people as possible should participate in creating the long-range plan. Give a little here and there so that more people can point to a little piece of the plan and say, "That's my idea, my contribution." Soon the association broadens, and the entire LRP effort becomes "our plan."

One proven way to achieve participation is through a Long-Range Planning Board (purposely given the designation of "Board" rather than "Committee" to distinguish LRP as a top-level matter). Membership on the LRP Board should rotate, thus giving more executives an opportunity to present their ideas and become acquainted with the long-term objectives and ambitions of other corporate functions and executives.

#### THE IMPORTANCE OF OBJECTIVITY

Every company has weaknesses, and it is just facing facts to recognize them. A long-range plan should build on corporate strengths, but it should be tempered in its aims or timing by any weaknesses that are recognized. Many of these weaknesses can, of course, be corrected. For example, the need for additional market research often shows up during the original "corporate audit." If the company is large enough to support a Market Research Department, the function should be organized and manned before the first Long-Range Plan is put into effect.

Other weaknesses must be tolerated for reasons beyond management control. If, for example, the Vice President for Sales holds his position because his family owns a significant share of the company, this hard fact must be considered in planning. If this executive is weak on factual analysis, give him an assistant who can handle that aspect of the job. If it's clear that, regardless of his ability or performance, the man might be the next president, face that fact and plan on it. Be objective, and the long-range plan has that much additional chance of success.

The importance of objectivity was clear to one young company in the electronics industry that had been built around a single product. As the firm expanded into a related product line, annual sales climbed to over a million dollars in a few years, largely on defense work.

A cutback in defense spending for the items manufactured by this company caused it to look seriously into the future. A decline in sales and profits triggered thinking about long-range planning.

The company entered LRP with some rather grandiose ideas about cashing in on the consumer electronics business, perhaps in the television field. But management, when forced to be completely objective, soon recognized that the company's greatest strength was in its superior engineering abilities and its production facilities for a high-quality, low-volume product.

By being so objective and putting aside personal ambitions to be "someone" to U.S. consumers, management was able to capitalize on the company's basic strength. Market research pointed out six industrial markets for the company's basic product line—industries where the products could be used in automation. Sales and promotion efforts were focused on these six specific markets, and the company's long-range plan included provision for further commercial applications after the company was equipped financially and became experienced in the necessary sales service.

#### SETTING INTERIM GOALS

One reason that old-fashioned forward planning rarely worked was the haphazard way in which interim goals were set. The so-called planning of a few years ago was often the result of a blue-sky management session held on a long weekend in some secluded lodge or resort. The optimists led the way, and the goals for the next year or five years were frequently pegged more on enthusiasm than fact.

How natural, then, for lower echelons of management to put little faith in goals that were seldom or never achieved! Modern LRP, to regain the confidence of the entire company, swings the pendulum back beyond center to compensate for existing attitudes. Goals for the first year, for example, are often set quite conservatively, with goals for subsequent years set closer to actual expectations. After one goal has been achieved, people at all levels rightfully take pride in the achievement and tackle the next goal without skepticism.

Another interesting aspect of interim goals is enthusiasm and support they can engender in people. It is not unusual to hear of young managers insisting on higher interim goals—then going right ahead and achieving them.

#### OVERCOMING RESISTANCE TO LRP

The case of a well-known manufacturer in the musical instrument industry confirms the value of setting realistic interim goals. This company had experienced a leveling-off in sales and profits. The old-timers were not upset, but younger board members, brought in during a recent period of additional financing, thought that the time for long-range planning had come.

The younger executives (they were in their late forties compared with an average age in the sixties for the older group) favored the adoption of a lower-priced line of instruments. But the older men, who had built the successful company, felt that the company's top product was the recognized quality leader in its field, and other products in the company's line shared in this high-quality image.

A market study of the company's external strengths and weaknesses confirmed the above reasoning, but pointed out an opportunity in the lower-price, lower-quality market. There were also opportunities to increase sales through better advertising and promotion, brand management, stronger dealer service, and the addition of more competent dealers.

Ideally, the long-range plan should have recommended immediate manufacture and sales of the lower-priced line, before competition became so strong that entry into this part of the market would be more difficult. But the very idea of selling a lower-priced product was a terrible shock to the older executives, so modified interim goals were adopted: all the recommendations were accepted, *except* those involving a low-priced product. This

procedure allowed achievement of the goals without major opposition from the older men, thus gaining their confidence in the overall plan while giving them time to get used to the idea of making and selling an instrument for the high-volume market.

#### BUILDING FLEXIBILITY IN THE PLAN

A frequent criticism of long-range planning is that it encourages inflexibility, and that it just "can't be applied" in certain industries where seemingly uncontrollable factors control the business cycle. But modern LRP, being a practical and objective management tool, incorporates alternative plans to be put into effect in the event of an unexpected business recession, a major war, or a significant change within an industry.

In the current profit squeeze, for example, companies with comprehensive long-range plans know where they can pare costs without impairing achievement of long-term goals. Companies without LRP that engage in the usual "paper-clip and pencil" campaigns to reduce costs often damage relationships with employees or with suppliers and customers far more than is warranted by the actual dollar savings.

One major processor of a basic raw material, which has an almost unlimited choice of markets on which to concentrate, was faced with the problem of retaining some measure of flexibility while continuing to sell on a selective basis. How could it pinpoint markets to serve selectively—not offering a complete line to every U.S. industry—while maintaining flexibility?

The answer, developed as part of this company's LRP, was a new method of determining market suitability that puts numerical values on many of the tangible and intangible factors usually studied by management when a new market or a change in emphasis is being considered—growth, sales cost, sales leverage, competition, distribution structure, etc. It has been applied in varying forms in several leading firms, but in the processor's long-range planning the analysis is done on a *continuing* basis.

This new tool, developed as a byproduct of LRP, has given this company the flexibility to spot trends that affect the profitability of its sales in all major markets—with full consideration of management objectives and company limitations.

If the preparatory work of LRP is done well, a lot of enthusiasm will be generated within the company. Management must take advantage of this initial interest to get the first plan written and in operation within six months of the start of the project. Any planning that takes longer than six months to get started stands a very good chance of never getting off the ground.

#### MAINTAINING I RP MOMENTUM

Even though some of the early enthusiasm will wear off, it is important to maintain a high level of vitality in the planning effort as it continues. Here are three tested ways of keeping the company, its daily operations, and its LRP all in tune with each other.

#### 1. Assign Specific Responsibilities

The president holds primary responsibility for long-range planning and cannot assign it to another executive, an assistant, a committee, or a consultant—but he may well call on all of this assistance to perform specific tasks. He may, for example, designate one man as coordinator of planning, a focal point for all LRP information. But the president alone retains the decision-making responsibility.

The president may also ask a consultant to make use of his objectivity and experience in evaluating corporate strengths and weaknesses. But the decision on what to do about the consultant's findings and recommendations will still remain with the president.

The detailing of individual responsibilities should be quite complete. If a new plant is to be built three years from now, the specific responsibilities for site selection, construction coordination, equipment selection and installation, financing, etc., should be assigned in the long-range plan itself—by name or job title, and with a target month for planned completion of each subtask. The more job functions that can be actually named in the basic plan, the greater will be the feeling of participation and chances of accomplishment.

Note the emphasis on timing as well as people. A master timetable for at least five years ahead, outlining who does what in each month, is perhaps the most vital document in the entire plan.

FEBRUARY, 1958

#### 2. Make Frequent Progress Checks

The most effective long-term measure of the value of planning is, of course, profits. Although the determination of profitability would require a comparatively long period of time, it would be unrealistic to assume that a company should wait years to determine the value of long-range planning or to assess corporate progress towards long-term objectives.

Earnings and return on investment are only one yardstick for measurement of progress. The president should be constantly informed of actual accomplishment in comparison to the master timetable, and he should develop such other measures of the progress of his company as rate of executive and employee turnover, progress of competitors, and attitudes of executives, employees, and customers.

#### 3. Revise When Necessary

A certain amount of rigidity must accompany every long-range plan, because LRP commits a company to a specified course of action. There are continual pressures to abandon one segment of the plan, to change one of its basic assumptions—or even to toss the whole plan out the window. The president must stand firm against most of these suggested diversions, but he must also have the wisdom to revise the plan or adopt one of its alternative courses when necessary.

Technology in an industry may experience a great advance through the discovery of a new material or a new technique, or world conditions might cause drastic changes in living habits or economic conditions. A company's long-range plan should be revised quickly enough to take early advantage of such significant changes, but not so fast that the plan is constantly being diverted to meet short-term conditions.

#### THE BENEFITS OF LONG-RANGE PLANNING

Progressive companies that have applied the long-range planning philosophy have noted many benefits, some expected and some quite unexpected. Crisis management becomes less pronounced. Most of the situations that can compound a crisis are considered in LRP, so fire-fighting management by exception tends to disappear. Greater emphasis can be put on the positive side of management by exception, analyzing outstandingly good performance rather than remedying mistakes.

Short-term dips assume less significance. If the corporate eye is kept focused over the horizon—on conditions that will prevail after five or ten more years of population increase and improved standard of living—then a few months of lower sales do not appear to be so devastating. LRP does not encourage complacence, but it enables a company to view current events in perspective.

New markets are entered as soon as possible. Any firm that has been selling to Europe, for example, or firms that have been considering such international activities, will be greatly affected by the European Common Market idea. Firms that looked ahead could have seen this move as a possibility years ago and would be able to implement their plans as ratification came closer. Firms without such long-range planning are obliged to start with a handicap of several years.

Money and men come easier. Financiers increasingly are insisting on knowing about a company's plan for the future. The need for money can be explained logically and clearly in terms of a company's long-range plan. New executive talent is also attracted to a company with modern LRP. A man can better envision his own growth and security when he sees that these desirable features have been spelled out in a long-range plan.

Long-range planning is working today in many companies as a management service to anticipate corporate requirements and corporate action. It is a mark of industrial leadership by which good management is made more effective and good companies retain or attain recognition in their industry.

The case histories of successful LRP—taken from many of the country's leading corporations—are enough to convince anyone who still needs convincing that long-range planning, in its modern sense, is the most significant advance in management thinking of the current decade.

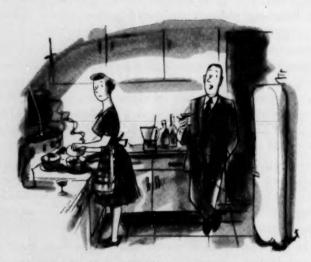
## Tempers and Temperatures in the Office

THE OLD HASSLE about whether to raise or lower the office window is fast disappearing with the spread of air conditioning. But the temperature—real or imagined—can still be a sore spot in the office.

For example, an insurance company had its offices done in a blue color scheme. When winter came, the girls complained of being cold, although the temperature was controlled at the same level as during previous winters. Even when the temperature was raised to 75 degrees, complaints continued and clerical output suffered. Then the office was redone in green and yellow. The gripes vanished and never returned, even when the temperature was lowered to the old normal for the office.

In another company, complaints about the office temperature were finally appeased by installing dummy thermostats in each office department so that clerks could "control" the temperature in their own work areas.

-Dun's Review and Modern Industry 10/57



"Mr. Harcourt kidded me a little bit about some of my inadequacies today, so then I kidded him a little bit about some of his. But then, I don't know, the fun seemed to go out of it somehow."

-Reprinted by special permission of The Saturday Evening Post.

Copyright 1957 by the Curtis Publishing Co.

## Plain Talk About the Shorter Work Week

(Continued from page 13)

allies. The strength of our national defense depends upon how hard we work at it. At this critical stage in history, surely there could be no greater folly than for Americans to decide to loaf more rather than to meet the challenge of the Soviet Union.

In a speech delivered late last year, Secretary of Labor James P. Mitchell predicted that there would be a labor manpower shortage of 10,000,000 workers in ten years. In the light of this information, the idea of shortening the work week fails to make sense.

#### THE INCREASE OF LEISURE

The second stated objective—giving workers the benefits of more leisure time—appears to have the sanction of history. The work week, about 70 hours long a century ago, has steadily declined to its present level, first reaching 40 hours about 25 years ago. A historical trend is clearly evident. We all grant that this is evidence of progress, and our impulse is to anticipate further progress along the same route.

Past progress has been made because labor has been made more productive through the development of more efficient tools and machinery. And, since workers have preferred to take the majority of the benefits of greater output in the form of higher wages rather than leisure, living standards have risen to their present high level.

Technological advances in the future should make possible similar increased benefits, but at a rate commensurate with gains in productivity. One authority estimates that, "if this rate of improvement [2 to 3 per cent per year] can be sustained, and if workers should divide their benefits between hours and wages as they did in 1909-41, it would take some 31 years to lower the work week one fifth to 32 hours, but living standards would rise steadily to new records."\*

#### WHO WANTS A SHORTER WORK WEEK?

For the country as a whole, there is little popular sentiment at this time favoring a reduction in working hours. On the contrary, available polls indicate that most people are opposed to the idea.

<sup>\*</sup> First National City Bank Monthly Letter, November, 1957.

For example, a Gallup Poll survey asked this question last July: "Some labor leaders are suggesting that workers should work a four-day week—that is, four days of eight hours each. Would you like to see such a plan adopted by most industries in this country?"

The results show that the general public voted "no" by two to one. (Women rejected the idea by a 3-to-1 vote.) Even the majority of manual workers opposed the idea. Here is the way the results appeared by occupational groups:

	Yes	No
Professional and business	25%	66%
White-collar workers	34%	58%
Farmers	13%	76%
Manual workers	39%	55%

(Those having no opinion account for missing percentages.)

Additional evidence comes from labor's own camp. At an AFL-CIO Conference on Shorter Hours held in September, 1956, George Brooks, research director of the Pulp, Sulphite, and Paper Mill Workers, stated that, aside from the desire for paid holidays and vacations, there is "no evidence in recent experience that workers want shorter daily or weekly hours." He pointed out that "workers are eager to increase their income, not to work fewer hours."

The experience of the Akron rubber workers supports this statement. Researchers of the Rubber Workers Union reported that, when workers are employed on six-hour shifts, as about 30,000 are in the rubber industry, a substantial number of them have two jobs. For instance, about 10 per cent of the rubber workers in Akron have a second full-time job, and 30 to 40 per cent have other part-time jobs.

Incidentally, one consequence of this situation is an over-all reduction in the number of people who can find employment in the area, since so many workers have two jobs. And it has been reported that the efficiency of workers holding two jobs has dropped off, since they come to work far less rested than those working a standard eight-hour day.

#### LESS WORK-OR MORE PAY?

The cool reception of the shorter work week idea by the rankand-file of labor suggests that labor officials may really be seeking, rather than more leisure for workers, a shorter official work week so that overtime payments would begin at some time less than 40 hours. This establishment of the shorter work week "in principle," which would actually be a huge wage increase, could be claimed as a political victory for its sponsors, while the inflationary effects of producing the same goods in the same hours for higher pay is somewhat masked by the aura of "social gain" that they hope will emotionally surround it.

Some union officials seem to find it advantageous to make something-for-nothing promises instead of proposing honest and sound something-for-something projects in the common interest. And, as is generally true in politics, they claim to be championing the righteous and deserving against the wicked and undeserving few. But the rise in members' information and sophistication is making it more difficult to sell them on programs that serve the officers' personal needs and that only appear to serve the members' interests. Look, for example, at these statements by union officials:

Donald W. Stone, Secretary-Treasurer of the Amalgamated Lithographers of America: "It is sometimes difficult for our members to understand the importance, to the officers at least, of the shorter work week."

Solomon Barkin, Research Director, Textile Workers Union of America: "The historical survey informs us of the importance of the continued agitation for the shortened work week in preparing the working population and the public for this objective."

Albert S. Epstein, Economist, International Association of Machinists: "There is no question, generally, that on the whole you will not find a great demand for shorter hours. Most people, most workers feel more interested in the goods they can buy with extra money than they are with the question of shorter hours and more leisure."

#### PARTLY OUR OWN NEGLIGENCE

The fault with these union demands does not rest with union members. Neither are union officials any more to blame than businessmen, professional people, teachers, and all people who have the means and the ability to be objectively thoughtful about what is going on. This situation has come about largely because of neglect on the part of management. We have failed to help employees and others to understand the simple economics of our competitive business system. We have failed to show how and why union officials must be made—and kept—the responsive servants rather than the dominant masters of their members. We have failed to show that it is through capital, machines, research, management, employee cooperation, and a sound business climate that real progress is achieved.

The choice of more goods or more leisure—or some of each—is one that the public, employees and consumers, will make. Let the public make its choice, but let it be an informed choice.

#### WHAT CAN MANAGEMENT DO?

The future strength of our economy will in large measure depend on our ability to overcome the economic illiteracy that supports unsound something-for-nothing schemes. But mere emotional resistance or an inflexible attitude of blunt opposition to a reduction in working hours will not accomplish this end. We want progress; we can and will have it. But we must make it clear that progress cannot come overnight, or though power plays at the collective bargaining table, or by legislative decree.

More specifically, here are some of the ways in which each company can contribute to this necessary task of economic education:

- Tell the essential economic facts about its own business and its industry to its employees and their neighbors in the community.
- 2. Explain how progress toward higher standards of living is really attained.
- 3. Explain the impact of shorter working hours on the individual, the company, and the community.
- 4. Make it clear to the public when premium pay, rather than fewer hours of work, is the motive of union leaders.
- 5. Point out the over-all employment picture and the probability of a continued tight labor market.

To accomplish this job of education, each individual company must have an effective communication program. The story must be told and retold by means of oral and written communications, by organized discussion groups, by periodic messages in employee publications, by talks before local groups. Individual executives can take the initiative by asking several members of their trade or industry associations (1) to study the economic problems of their employees in relation to the problems of the economy as a whole, and (2) to formulate, as a working model, a communications program that individual member companies can adapt to their own situations.

In issues as serious as how best to advance our economic and spiritual well-being, and how in the process to have unions democratically performing a constructive service in the balanced best interests of all concerned, management must take a firm, enlightened stand. The place to begin is here and now, by ceasing to profess agreement with things we know are bad—economically, morally, and politically. We are not standing against progress when we object to a shorter work week now; on the contrary, if America is to continue to progress, we must oppose it.

Understanding these points requires economic and political sophistication. Promoting this sophistication is the task before us; it is the challenge that faces every businessman.

## Health Insurance for Retired Employees

A NEW APPROACH to hospital and medical insurance for retired employees that utilizes a single-premium policy may hold the answer to the problem of providing financial security for the rapidly increasing number of old persons.

Under the new plan, the retired employee receives a noncancellable individual policy in which the benefits are guaranteed for life. Such coverage is especially important to older persons because they are likely to run into heavy medical expenses when they can least afford to pay the bills.

For a qualified group, issuance of the new policy would be guaranteed without medical examination and without regard to the employee's health status at the date of issue. Benefits provided are similar in kind and amount to those the employee previously had under his company's group policy. An important part of the plan is that the dollar amount of benefits is not subject to any ceiling nor any reduction due to the employee's age. One important benefit to the employer is that all administrative expense is eliminated after the single payment.

-Ben Weberman in The Journal of Commerce 12/11/57

## Diplomas by the Dozen

THE EDUCATIONAL LEVEL of the civilian labor force in the U.S. is still rising. According to figures of the Bureau of the Census, the median level of education of persons aged 18 to 64 in the labor force is 12 years of school—the equivalent of a high school education. In 1952 the average was 11 years and just prior to World War II it was only 9.

An important factor in this advance has been the growing percentage of workers with college training. In 1957, about 18 per cent of the workers in the 18-64 age group had at least one year of college and 9 per cent were college graduates. The comparable figures in the 1940's were 14 per cent and 6 per cent. The proportion with at least a high school diploma has also been moving upward sharply, while the percentage without any education beyond the elementary grades has been diminishing at a rapid rate.

—Current Population Reports (U.S. Department of Commerce, Washington, D.C.) 11/57



"My husband's company only pays for half a wife."

-Sales Management

## The Reporting Function

(Continued from page 22)

be, all reporting in a company can never be channeled through one unit. Nevertheless, the reporting unit must keep itself aware of what other reports are being issued. If this is done, duplicate reports can usually be eliminated and conflicting reports reconciled.

Administratively, there are a number of things beyond simply operating a monthly reporting set-up for top management that the head of the reporting unit must take care of. In a decentralized operation, for example, each division manager usually also has (or wants) a unit to prepare reports pertaining particularly to his division. Although the reporting unit for the company as a whole is responsible only for collecting and presenting to top management information on each division, together with an analysis of the divisional operations, it should see that there is some uniformity and continuity between division reports and companywide reports.

It is important to note that the accounting provisions for the divisions in widely diversified companies may of necessity be widely different. For example, what is considered indirect labor or overhead in a process operation would be considered direct labor in an assembly operation. Thus, while the divisional reporting unit is responsible to the divisional manager for performance, it is responsible to the central reporting unit for techniques. It is very much the same line-staff relationship that exists between the corporate controller and divisional controllers.

#### STAFFING THE REPORTING UNIT

Perhaps the most important part of organizing or reorganizing the reporting function is staffing. In fact, the abilities of the personnel available often determine what organizational provisions are made for the reporting process. For instance, a controller who has all of the abilities of a good reporter might very well delegate the administrative and technical phases of his job and concentrate his efforts on reporting, rather than the other way around.

Just what are the qualities that are required of a good reporter? First and foremost, of course, integrity is necessary. Because of the ease in which financial figures can be twisted to prove one thing

or another, the head of the reporting unit must make a conscious effort at all times to be objective.

Secondly, he must have a high degree of analytical ability and the ability to interpret his analysis to others. It takes the canny knack of being able to see trends and relationships, rather than isolated facts and figures, to be a good reporter. This is not an attribute usually found in an accountant because of his infinite patience with detail.

Next, the good reporter must have the showmanship needed to present a story (either in person or in writing) that will get the basic information across to the receiver understandably and convincingly. And, finally, the head of the reporting unit should have a good working knowledge of the company and its operations and be mature enough in a business sense to recognize the real informational needs of top management.

Where do you get such men? Anyone with well-rounded business education or experience is a likely candidate. He can come from almost any part of an organization—from sales, from production, or even from research and development. It is difficult to hire an experienced man to take over a reporting system, for financial reporting has as yet no proven training ground. Schools offering courses have not been operating long enough to produce a generation of graduates who have proven the value of the curriculum. Furthermore, so few companies have done a really good job of internal financial reporting that there are few men available who have been trained on the job. Thus, the best way to get good financial reporters is to grow them in your own company.

Working with the head of the reporting unit will be a number of assistants—chartmakers if charts are used, typists, and, if the job is big enough, analytical assistants. These last positions, of course, are the best place to train future reporters or to try out those who seem to have ability.

#### **NEW AND SPECIAL REPORTS**

As times change, requirements for various reports change, too. Nevertheless, it shouldn't be necessary to change reports too frequently. Changing times may increase the number of basic management responsibilities, but seldom their relative importance. The DuPont chart system, for example, has been virtually unchanged since its inception nearly 40 years ago.

Special reports, too, often present an administrative problem. Here again, if you have a sound basic reporting system, special reports will be required very infrequently. Operational analysis should be so complete that significant trends can be brought out in the narrative accompanying each periodic report. The work load of the reporting unit should be established on this basis.

Of course, there will be requests for special reports from time to time. When they occur, however, the effective reporting unit should already have the raw materials on hand and partially analyzed. One of the reasons for the establishment of a separate reporting unit is the opportunity it gives for special analyses to be reported on a regular basis.

The work of the reporting unit is governed pretty much by the various meeting schedules of top management groups—as, for instance, the regular monthly meetings of the board of directors and the executive committee. Allowing for prerelease consultation with the line executives involved, the reporting unit has very little time to work from the accountants' closing figures to the completed report. Most of the work has to be done before the figures arrive. That is one reason for establishing good relationships with line executives through prerelease consultations; with cooperation, the explanations are often available before the figures.

#### HOW MUCH FOR REPORTING?

Because of the near impossibility of measuring the effectiveness or the productivity of a reporting unit, it is difficult to say what it should cost. The cost of maintaining the reporting unit can be considered independently of accounting costs, however, because the cost of record keeping is going to remain relatively constant regardless of the level of reporting activity.

A sound accounting system should provide all the raw materials needed for the reporting system. Although some maintain that good reports require figures not found in the books of accounts, a critical look at such cases will usually reveal either that the accounting system is woefully lacking or that the requested information is not really needed.

In any event, the total number of personnel involved is usually small—about eight in the central control unit of a firm the size of Koppers Co., for example. Efficient financial communication is so important to the welfare of the entire company that it is well worth the comparatively small cost to get the figure facts in the hands of those who need them.

## Can Computers Think?

EVIDENCE HAS BEEN FOUND that modern electronic computers may be able to "learn" from experience and get things done without being told exactly how. In experiments conducted by R. M. Friedberg, a Harvard Medical School student, an IBM 704 data-processing machine exhibited evidence of "judgment"—the ability to form habits, to learn, to solve problems more easily after practice, and to retain the benefits of experience.

In the experiments the computer—called Herman—was connected to an element called Teacher. Teacher examined Herman's memory at frequent intervals to see whether a desired task had been performed successfully. A third element, Learner, took Teacher's announcements of success or failure and evaluated these in comparison with the instructions that Herman had followed. All three elements—Herman, Teacher, and Learner—were simulated by the IBM 704.

Normally, a highly skilled mathematician sets up in such a computer a program that he knows will accomplish a particular end; the computer then relieves the mathematician of tedious calculations. In the experiment, a "universe" of programs was provided, consisting of all known programs for solving a problem on the 704 computer. The question was whether Herman-Teacher-Learner would have to go through an astronomical number of programs in seeking the right one for the solution of a specific problem or whether the machine had some judgment. It was found that the computer could "learn" from experience and eventually come up with the right answer every time.

In explaining the significance of his findings, Mr. Friedberg points out that if we are to make machines that will perform such activities as speaking, understanding, or translating human languages and solving mathematical problems with imagination, either these activities must be reduced to a science so exact that a machine can be told precisely how to go about doing them or we must develop a machine that can do things without being told precisely how. Mr. Friedberg feels that it may be easier and quicker to make a machine that can "learn."

-Robert K. Plumb in The New York Times 1/4/58



# SURVEY OF BOOKS FOR EXECUTIVES

THE EFFICIENT EXECUTIVE. By Auren Uris. McGraw-Hill Book Company, Inc., New York, 1957. 308 pages. \$4.95.

Reviewed by Harry A. Bullis\*

In the recent deluge of books on executive leadership it is refreshing to find one that is both entertaining and wise. The Efficient Executive belongs in this rare category. In its discussion of the qualities necessary for success as an executive, it is at once serious and amusing, penetrating and casual.

Mr. Uris points out that the executive, like the physician or any other professional man, must excel in the techniques of his profession—management. Every executive knows that it takes efficiency to get things done on schedule and that he is measured by the results he achieves, not only in the attainment of material objectives, but also in the building of men and morale. While there is no royal road to efficiency, the author gives some helpful ground rules.

Under pressure from both above and below, the executive is subject to constant strain. Mr. Uris distinguishes between "constructive tension" and "destructive tension," and recommends that the executive develop what he calls "frustration tolerance." As he shrewdly observes, "The wisest among us are content to end up with more satisfactions than disappointments."

In his detailed examination of executive activities, Mr. Uris classifies them under three main heads: organization-dictated, job-dictated and self-dictated. The organization-dictated activities are those with other management people at the same and higher levels. Since they include conference work and written communications, they entail the development of the executive's powers of persuasion and the ability to write the perfect memo.

Job-dictated activities are concerned with the department or work under the executive's supervision—the things for which he has personal responsibility and which he seeks to make efficient. Mr. Uris gives many hints on making the best possible use of the available tools in two entertaining chapters, "The Science of Wastebasketry" and "The Art of Failsmanship." In discussing how to get the best out of subordinates, he stresses that the paramount need is

<sup>\*</sup> Chairman of the Board, General Mills, Inc.

to develop "the creative genius of the individual" within the framework of the group. The self-dictated activities are related to self-improvement and the desire to get ahead; they include both education and recreation.

The executive of yesterday got ahead through individual aggressiveness, but the author points out that today's executive must function as a member of a group. He must also keep abreast of expanding technology, for in management, as in science, the stage is set for innovators. However, the author emphasizes that no matter what changes take place, the executive will still be working with people, and he will be successful and happy only if he helps bring success and happiness to others.

No one can become an efficient executive simply as a result of reading a book. Nevertheless, a man can absorb ideas and learn how to search out his own deficiencies. The Efficient Executive should help executives, both young and old, to achieve a better understanding of themselves and, in so doing, to gain a clearer understanding of their associates and subordinates as well.

ARE YOU LISTENING? By Ralph G. Nichols and Leonard A. Stevens. McGraw-Hill Book Company, Inc., New York, 1957. 235 pages. \$3.75.

Reviewed by Hugh Gyllenhaal\*

From extensive tests carried out by the authors of Are You Listening? it appears that the average person remembers only about half of what he hears, although he spends more time in listening than in any other activity. There is no doubt that most of us do a miserable job of listening—probably far worse than we imagine—and we can learn some useful things on a long-neglected subject from this practical and highly readable book.

The authors attack the assumption that listening ability depends largely on intelligence and stress the importance of training. Among the benefits of better listening they discuss are the broadening of knowledge, the better appreciation of literature, the improvement in the use of language, and the therapeutic values it confers.

The techniques of listening are presented under such headings as awakening to listening, ironing out problems through listening, how good listening can save dollars, critical listening to high-pressure talk, and emotional blocks to objective listen-Though the book contains a number of entertaining anecdotes, it is based on sound theories of learning, social psychology, and general semantics. However, the pertinent subject of feedback is omitted, and to some readers such concepts as "the four mental processes in a listener's mind" and "the several brands of silence" will seem dubious oversimplifications.

There are certain limitations in devoting a whole book to only one phase of communication. The authors tend to overlook the fact that it is, after all, a two-way process. For example, they recommend that listeners be "selfish, grasping, greedy,

<sup>\*</sup> Senior Associate, Conference Counselors, New York.

practical-minded, and avaricious," because "the more we take from the speaker through listening, the more he will give." To this reviewer, it seems that there are limits to a speaker's generosity. When it gets to be a grasping, greedy affair, listening, like everything else, can be overdone.

TOWARD THE AUTOMATIC FACTORY. By Charles R. Walker. Yale University Press, New Haven, Conn., 1957. 254 pages. \$5.00.

Reviewed by Earl Brooks\*

At Lorain, Ohio, in January, 1949, a steel company and 33 men began operating the first continuous, semi-automatic seamless pipe mill in the United States. These 33 men, later 30, and then 27, produced four times as much pipe as 75 or more men had produced in the adjacent nonautomatic mill.

Through observations and interviews during a three-year period, Mr. Walker studied the impact on the workers of this major technological change in the steel industry. He clearly describes the process and work environment, individual job responsibilities, and group relationships. His case study includes the reactions of the workers at the end of two years, and again a year later, to pay, incentives, promotional opportunities, job security, and supervision.

In the early stages, although the plant was new and modern, the workers complained about working conditions. The company was slow in developing an incentive plan, causing discontent and suspicion among the men. When, after 18 months, the incentive plan was finally installed, a slow-down period occurred. The workers objected to losses from mechanical breakdowns and insisted that the maintenance men be included in the plan.

At the end of two years, the men felt that the company did not encourage them sufficiently to participate in solving production problems. They also thought that their promotional opportunities were more limited than in the old mill, and that contact with their supervisors was not close enough. However, their primary interest was in making more money.

After three years, the workers took a somewhat different view of their jobs in the new plant. The work was considered generally easier physically but more difficult mentally. However, unmechanized jobs seemed to them harder than before because of the increased pace. As the mill went faster, new rhythm and increased skills seemed to offset previous fears and nervousness. The men had confidence in the automatic machines. but under certain conditions, found manual operations more efficient. Although they said their pay was higher than in the old mill, serious defects in the incentive plan were criticized.

Though the workers believed that human relations had improved, they thought that there was still not enough company interest in their participation in production problems.

<sup>\*</sup> Professor of Administration, Cornell University Graduate School of Business and Public Administration.

Although they were glad to be relieved of physical drudgery, they thought that the machines had created unemployment and lessened opportunities for promotion.

This case study will interest all concerned with the trend toward automatic production, and it may help others avoid some of the difficulties which were encountered at Lorain. Fear, faith, and technical change are the main topics of the book. Mr. Walker suggests that the management actions which helped the new plant to operate successfully included: (1) retraining the displaced men and placing them on other jobs in the company; and (2) making it clear that others besides the small crew, such as indirect labor, would benefit from the mill's prosperity. (This resulted in a 100 per

cent rise in production in a short time.)

Among the areas for improvement, Mr. Walker suggests:

- The incentive plan should be installed as soon as possible and adequate time devoted to explaining it.
- Thorough training in the new operations should be given.
- Nonmonetary incentives should be used as well as monetary.
- There should be close personal contact between supervisors and workers.
- The union should be informed at the start that fewer men will be required after the break-in period.
- The group's contribution, rather than individual performance, should be emphasized.
- 7. Educational opportunities for employees should be provided.

## Briefer Book Notes

(Please order books directly from publishers)

#### GENERAL.

THE NEXT HUNDRED YEARS. By Harrison Brown, James Bonner, and John Weir. The Viking Press, New York, 1957. 175 pages. \$3.95. Highlights of a series of discussions among chief executives of 30 major corporations and three scientist-authors—a geochemist, a biochemist, and a psychologist. Their purpose was to explore the future of the earth's natural resources in relation to man and his technology, with specific reference to raw materials and products, manpower, brainpower, and industrial processes. The result is a preview of some of the problems—and solutions—that will come to the fore in the next hundred years.

EFFECTIVE INDUSTRIAL MANAGEMENT. By James L. Lundy. The Macmillan Company, New York, 1957. 579 pages. \$7.00. This text for introductory survey courses in management describes what management does and how, but the primary emphasis is on "why." As a result, this is not merely a descriptive work, detailing current practices, but one that suggests what should be done to improve them. Most chapters, especially those on subjects like manpower development, collective bargaining, or statistical quality control, are likely to interest operating managers as well as students.

INDUSTRIAL ORGANIZATION AND MANAGEMENT. By Ralph Currier Davis. Harper and Brothers, New York, 1957. 910 pages. \$8.25. Third edition. This comprehensive text is intended for use both by students and operating managers. The revised edition brings the basic material fully up to date and, in addition to presenting a new chapter on marketing manufactured goods, contains rewritten and expanded information on many topics, including performance rating, fatigue and delay allowances, and standard data relationships.

BUSINESS LETTERS. By Walter Kay Smart, Louis William McKelvey, and Richard Conrad Gerfen. Harper and Brothers, New York, 1957. 593 pages. \$8.00. The fourth edition of this widely-used college and business reference covers all types of standard business letters, with expanded sections on form letters, company reports, and letters dealing with adjustment problems and customer complaints.

#### MARKETING

SUCCESSFUL SELLING STRATEGIES: How to Climb the Ladder to Sales Success. By Charles L. Lapp. McGraw-Hill Book Co., Inc., New York, 1957. 368 pages. \$4.95. A handbook for salesmen that discusses such topics as planning and evaluating one's sales effort, improving basic selling techniques, and establishing a program of self-improvement. Numerous checklists are included.

ADVERTISING AND MARKETING TO YOUNG PEOPLE. By Eugene Gilbert. Printers' Ink Books, Pleasantville, N.Y., 1957. 378 pages. \$7.50. A comprehensive report on young people as purchasers and their influence on adult purchases, based on research studies made by the author for various manufacturers, advertising agencies, and publications. Topics include promoting to youth, advertising to youth, contests, premiums, packaging and point of purchase, character and trade-mark licensing, sampling, the bride market, and retailing to young people. Appended are a discussion of techniques for testing for sampling errors and a study of media for advertising to the teen-ager.

NEW UNDERSTANDING IN THE AGENCY-CLIENT RELATIONSHIP. Proceedings of the Third Marquette University Advertising Conference. Marketing Reports and Studies No. 7. Bureau of Business and Economic Research, Robert A. Johnston College of Business Administration, Marquette University, Milwaukee, Wis., 1957. 138 pages. \$2.50. Topics of current interest discussed in these conference proceedings include changing the commission system of agency payment, measuring the effectiveness of an advertising campaign, the agency networks, methods for the selection of an agency, and the agency marketing service.

**THE BIG NAME.** By William M. Freeman. Printers' Ink Books, New York, 1957. 230 pages. \$3.75. A study of the use of endorsements in advertising. The author discusses such questions as how endorsements can be used, selecting endorsers, handling legal aspects, and how to do your own policing. Numerous examples of endorsements for a variety of products are given.

FEBRUARY, 1958

# AMA CONFERENCE CALENDAR

FEBRUARY- APRIL, 1958

DATE	CONFERENCE	LOCATION
February 3-5	International Management Association Conference	Biltmore Hotel, New York
February 19-21	SPECIAL RESEARCH AND DE- VELOPMENT CONFERENCE: "How to Adjust to Changing Business Conditions."	Biltmore Hotel, New York
March 3-5	SPECIAL FINANCE CONFERENCE ON Electronics	Statler Hotel, New York
March 5-7	SPECIAL INSURANCE CONFERENCE on Employee Benefits	Drake Hotel, Chicago
March 19-21	RESEARCH AND DEVELOPMENT CONFERENCE	LaSalle Hotel, Chicago
March 31-April 2	SPECIAL MANUFACTURING CONFERENCE On Cost Reduction Through Effective Purchasing and Materials Management	Palmer House, Chicago
April 9-11	RESEARCH AND DEVELOPMENT CONFERENCE	Statler Hotel, New York
April 14-16	GENERAL MANAGEMENT DIVI- sion Forum on Management of the Smaller Company	Ambassador Hotel, Los Angeles
April 23-25	SPECIAL CONFERENCE ON PLANT LOCATION	Roosevelt Hotel New York

To register or to obtain additional information on any of the conferences listed above, please contact Department M2, American Management Association, 1515 Broadway, New York 36, N.Y.

## SUPERVISORY DEVELOPMENT COURSE

AMA's NEW SUPERVISORY DEVELOPMENT COURSE is aimed directly at improving the on-the-job performance of your supervisors, both in the office and on the production line. Serving as a unique adjunct to your company's internal training program, the Course has been particularly successful in teaching supervisors how to be more effective in such areas as grievance handling, methods improvement, cost reduction, budgets, quality control, and training.

Both in general sessions and in small project groups, supervisors explore the problems they are most likely to meet in their everyday work. They discuss solutions with their fellow supervisors and with course leaders—seasoned operating executives who are experts in their respective fields. These leaders draw on their own broad experience to help your supervisors to develop basic managerial skills, to prepare for increased responsibility, and to think as managers.

The course is given in three one-week units. The first two units run consecutively, and the third a month later—after registrants have had a chance to apply course material to their own work and need a sound critique of results.

COURSE SCHEDULE				
Course No.	Date	Place		
Course #5	Feb. 10-14 Feb. 17-21 Mar. 17-21	AMA Academy, Saranac Lake, N. Y		
Course #6	Mar. 24-28 Mar. 31-Apr. 4 Apr. 28-May 2	Carter Hotel Cleveland, O.		
Course #7	Apr. 14-18 Apr. 21-25 May 19-23	AMA Academy, Saranac Lake, N. Y.		
Course #8	May 5-9 May 12-16 June 9-13	AMA Academy, Saranac Lake, N. Y.		

To register your supervisors for any of the above dates, write, wire, or phone:

COURSE REGISTRAR, DEPARTMENT M2

AMERICAN MANAGEMENT ASSOCIATION, INC. 1515 Broadway • Times Square • New York 36, N. Y.



# MEASURING

One of the earmarks of the able executive is his ability to measure accurately. Whether he is dealing with money, men or management policy, his conclusions will be wrong unless his yardsticks are right.

That's why so many business men turn to AMA's Management Information and Library Service. Here they find thousands of principles, practices and procedures that serve other managers as guiding standards.

All AMA activities, in fact, provide practical criteria against which management methods can be conveniently gauged. Men who seek such data to measure by are usually the men who also measure up.



EDUCATION IN DEPTH
FOR MANAGEMENT, OF MANAGEMENT, BY MANAGEMENT